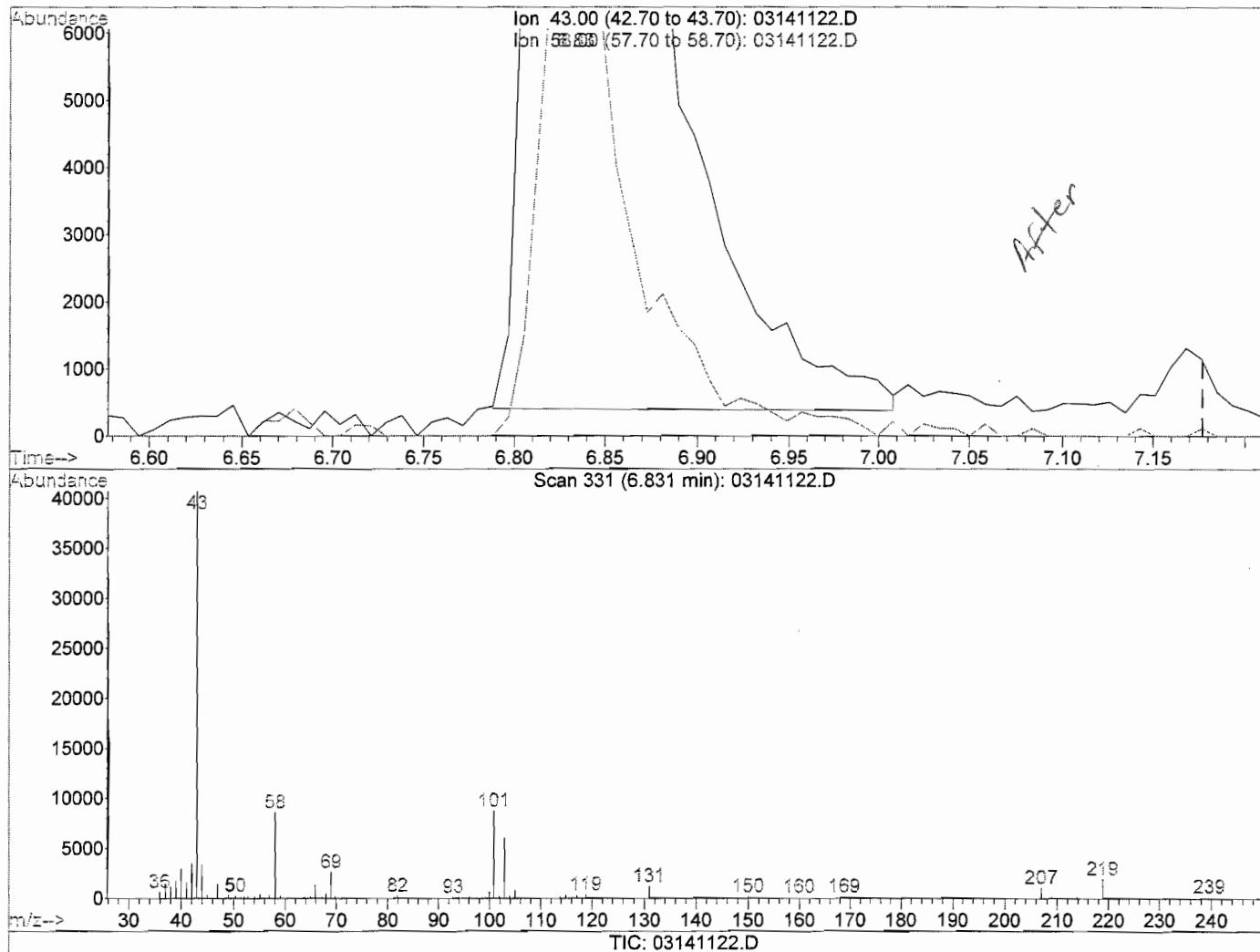


Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
 Acq On : 14 Mar 2011 6:01 pm Operator: NL  
 Sample : BS/ICV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:37 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration



(11) Acetone (T)

6.83min 35.28ug/L m

response 123411

Ion	Exp%	Act%
43.00	100	100
58.00	21.30	22.09
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
 Acq On : 14 Mar 2011 6:01 pm Operator: NL  
 Sample : BS/ICV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:37 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	124354	200.00	ug/L	0.00
4) Pentafluorobenzene	10.48	168	706016	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	1059053	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	958616	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	484312	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	399298	24.67	ug/L	0.00
Spiked Amount	25.000		Recovery	=	98.68%	
46) Toluene-d8	13.99	98	1164232	24.93	ug/L	0.00
Spiked Amount	25.000		Recovery	=	99.72%	
60) 4-Bromofluorobenzene	17.62	95	506259	23.94	ug/L	0.00
Spiked Amount	25.000		Recovery	=	95.76%	

## Target Compounds

				Qvalue
2) Ethanol	5.90	45	28459	574.16 ug/L 98
3) tert-Butanol (TBA)	7.41	59	106678	169.11 ug/L # 94
5) Dichlorodifluoromethane	4.48	85	572815	22.15 ug/L 98
6) Chloromethane	4.78	50	323600	22.05 ug/L 98
7) Vinyl chloride	5.06	62	394350	25.13 ug/L 98
8) Bromomethane	5.67	94	272231	21.51 ug/L 95
9) Chloroethane	5.87	64	331779	24.80 ug/L 99
10) Trichlorofluoromethane	6.68	101	898550	27.89 ug/L 97
11) Acetone	6.83	43	123411m	35.28 ug/L
12) Iodomethane	7.46	142	475479	30.25 ug/L 89
13) 1,1-Dichloroethene	7.41	96	418883	25.32 ug/L 98
14) Methylene chloride	7.60	84	453568	23.28 ug/L 100
15) Freon 113	7.67	101	520522	25.12 ug/L 99
16) Carbon disulfide	7.93	76	1119644	24.34 ug/L 98
17) trans-1,2-Dichloroethene	8.48	96	452357	24.13 ug/L 99
18) MTBE	8.62	73	797919	23.70 ug/L 100
19) 1,1-Dichloroethane	8.81	63	854999	24.47 ug/L 100
20) Vinyl acetate	8.96	43	594376	36.78 ug/L 100
21) n-Hexane	9.33	86	89710	26.01 ug/L 95
22) 2-Butanone (MEK)	9.35	72	27714	29.75 ug/L # 1
23) Diisopropylether (DIPE)	9.36	45	1560005	24.45 ug/L 98
24) cis-1,2-dichloroethene	9.55	96	461057	22.94 ug/L 99
25) Bromochloromethane	9.76	128	164663	23.70 ug/L 98
26) Chloroform	9.82	83	873342	23.33 ug/L 100
27) 2,2-Dichloropropane	9.93	77	714082	23.72 ug/L 97
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	1147307	23.69 ug/L 98
30) 1,2-Dichloroethane	10.66	62	551923	23.58 ug/L 100
31) 1,1,1-Trichloroethane	10.80	97	768193	23.44 ug/L 99
32) (TAME) tert-Amyl methyl eth	11.51	73	814111	24.07 ug/L 100
34) 1,1-Dichloropropene	11.03	75	635340	24.14 ug/L 99
35) Carbon tetrachloride	11.27	117	658743	23.65 ug/L 99
36) Benzene	11.32	78	1541707	23.24 ug/L 100
37) Dibromomethane	12.05	93	226718	23.23 ug/L 100
38) 1,2-Dichloropropane	12.10	63	374921	22.43 ug/L 98
39) Trichloroethene	12.15	95	458419	22.28 ug/L 97
40) Bromodichloromethane	12.21	83	575865	22.16 ug/L 98

(#) = qualifier out of range (m) = manual integration

03141122.D 031411.M Tue Mar 15 14:37:52 2011

MC  
3/15/11

M 15/11

Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
 Acq On : 14 Mar 2011 6:01 pm Operator: NL  
 Sample : BS/ICV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:37 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

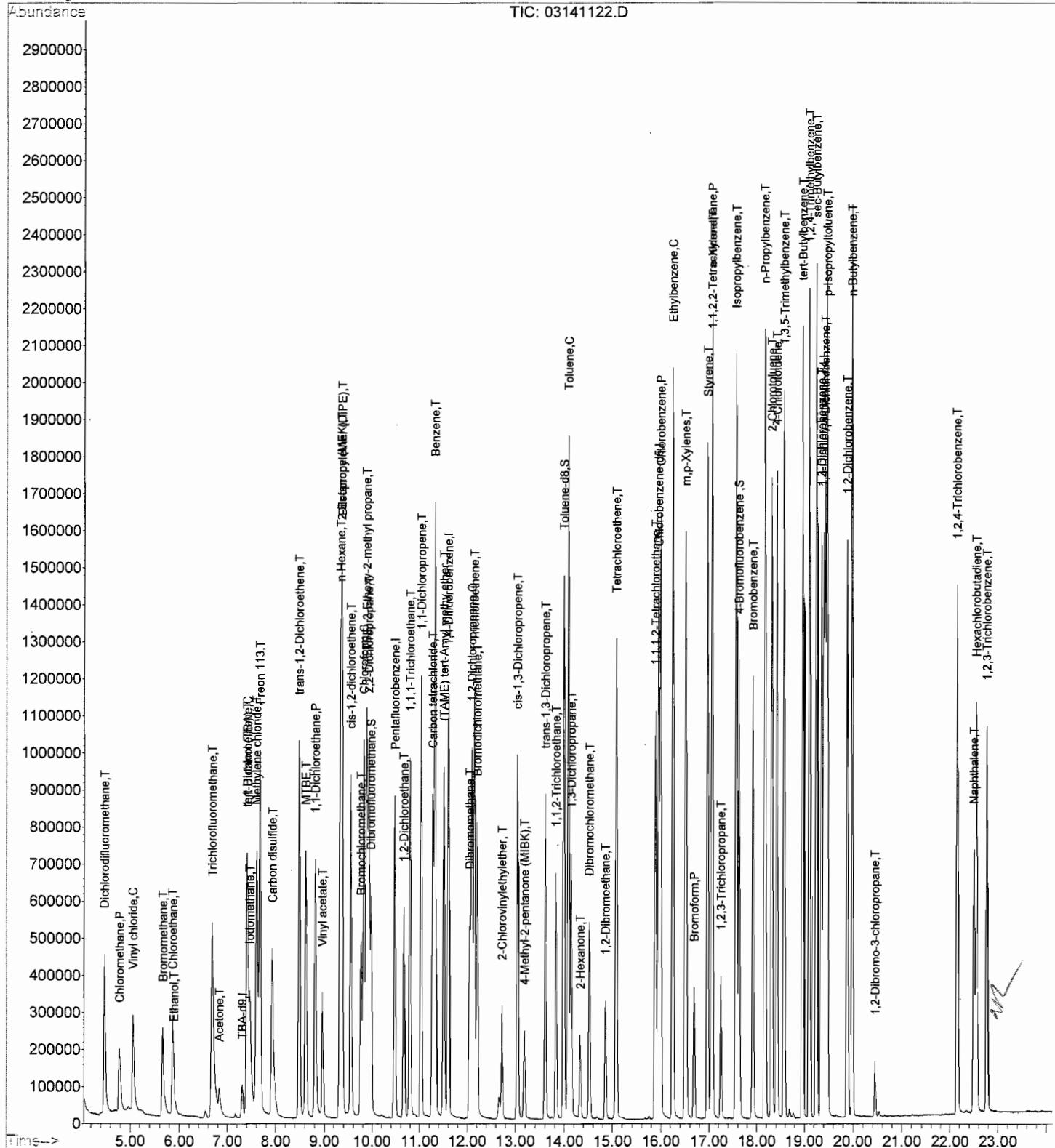
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	132304	24.18	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	587320	23.10	ug/L	99
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	211506	25.62	ug/L	97
44) trans-1,3-Dichloropropene	13.61	75	513196	24.53	ug/L	99
45) 1,1,2-Trichloroethane	13.83	97	252639	22.79	ug/L	98
47) Toluene	14.09	92	921737	22.86	ug/L	100
49) 1,3-Dichloropropane	14.15	76	426003	22.73	ug/L	98
50) 2-Hexanone	14.33	43	190481	32.36	ug/L	99
51) Dibromochloromethane	14.52	129	344977	23.25	ug/L	98
52) 1,2-Dibromoethane	14.86	107	262260	23.20	ug/L	100
53) Tetrachloroethene	15.08	164	397258	23.75	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	376400	21.98	ug/L	99
55) Chlorobenzene	15.99	112	1020483	23.18	ug/L	99
56) Ethylbenzene	16.25	91	1815661	23.05	ug/L	99
57) m,p-Xylenes	16.51	106	640911	23.10	ug/L	97
58) Styrene	16.96	104	1026074	24.34	ug/L	99
59) o-Xylene	17.07	106	606537	24.78	ug/L	95
62) Bromoform	16.69	173	208945	24.19	ug/L	97
63) 1,1,2,2-Tetrachloroethane	17.05	83	238281	25.47	ug/L	100
64) 1,2,3-Trichloropropane	17.25	110	70538	25.98	ug/L	96
65) Isopropylbenzene	17.56	105	1742791	28.02	ug/L	100
66) Bromobenzene	17.93	156	426879	24.82	ug/L	99
67) n-Propylbenzene	18.17	91	2149723	26.67	ug/L	99
68) 2-Chlorotoluene	18.32	91	1267135	24.91	ug/L	99
69) 4-Chlorotoluene	18.42	91	1309905	25.34	ug/L	100
70) 1,3,5-Trimethylbenzene	18.58	105	1413798	25.34	ug/L	98
71) tert-Butylbenzene	18.96	119	1165627	25.69	ug/L	99
72) 1,2,4-Trimethylbenzene	19.11	105	1465752	26.22	ug/L	99
73) sec-Butylbenzene	19.25	105	1860992	26.03	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	747624	24.26	ug/L	100
75) 1,4-Dichlorobenzene	19.45	146	767403	24.90	ug/L	99
76) p-Isopropyltoluene	19.48	119	1484315	25.73	ug/L	99
77) 1,2-Dichlorobenzene	19.88	146	671058	24.89	ug/L	100
78) n-Butylbenzene	19.99	91	1506477	26.01	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.45	75	38751	22.87	ug/L	96
80) 1,2,4-Trichlorobenzene	22.15	180	596391	27.26	ug/L	100
81) Naphthalene	22.50	128	706561	27.72	ug/L	98
82) Hexachlorobutadiene	22.55	225	321549	27.85	ug/L	99
83) 1,2,3-Trichlorobenzene	22.77	180	474453	27.05	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
Acq On : 14 Mar 2011 6:01 pm Operator: NL  
Sample : BS/ICV Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:37 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## 8260 Continuing Calibration (CCV) Report

**Sample Name** BS/ICV  
**Data File Name** 03141122.D  
**Operator** NL  
**Date Acquired** 3/14/2011 6:01  
**Acq. Method File** 8260B

<b>Internal Standards</b>	<b>Calib. Response</b>	<b>CCV Response</b>	<b>Low</b>	<b>High</b>	<b>P/F</b>	
TBA-d9	125792	124354	62177	248708	TRUE	
Pentafluorobenzene	699455	706016	353008	1412032	TRUE	
1,4-Difluorobenzene	1014981	1059053	529527	2118106	TRUE	
Chlorobenzene-d5	936018	958616	479308	1917232	TRUE	
1,4-Dichlorobenzene-d4	492554	484312	242156	968624	TRUE	
<b>Compound</b>	<b>Amount</b>	<b>Spiked Amount</b>	<b>Recovery</b>	<b>Low</b>	<b>High</b>	<b>P/F</b>
Ethanol	574.16	250	229.66	80	140	FALSE NR
tert-Butanol (TBA)	169.11	125	135.29	80	120	FALSE L
Dichlorodifluoromethane	22.15	25	88.59	60	150	TRUE
Chloromethane	22.05	25	88.21	60	140	TRUE
Vinyl chloride	25.13	25	100.52	80	120	TRUE
Bromomethane	21.51	25	86.04	70	140	TRUE
Chloroethane	24.80	25	99.21	70	130	TRUE
Trichlorofluoromethane	27.89	25	111.58	70	150	TRUE
Acetone	35.28	25	141.11	10	150	TRUE
Iodomethane	30.25	25	120.99	70	140	TRUE
1,1-Dichloroethene	25.32	25	101.29	80	120	TRUE
Methylene chloride	23.28	25	93.11	70	120	TRUE
Freon 113	25.12	25	100.47	60	140	TRUE
Carbon disulfide	24.34	25	97.38	70	130	TRUE
trans-1,2-Dichloroethene	24.13	25	96.52	80	120	TRUE
MTBE	23.70	25	94.81	70	130	TRUE
1,1-Dichloroethane	24.47	25	97.90	70	125	TRUE
Vinyl acetate	36.78	25	147.12	40	150	TRUE
n-Hexane	26.01	25	104.05	70	130	TRUE
2-Butanone (MEK)	29.75	25	119.00	40	150	TRUE
Diisopropylether (DIPE)	24.45	25	97.82	80	130	TRUE
cis-1,2-dichloroethene	22.94	25	91.76	80	120	TRUE
Bromochloromethane	23.70	25	94.80	80	120	TRUE
Chloroform	23.33	25	93.31	80	120	TRUE
2,2-Dichloropropane	23.72	25	94.89	80	130	TRUE
(TBE) 2-Ethoxy-2-methyl propan	23.69	25	94.75	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>24.67</b>	<b>25</b>	<b>98.67</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	23.58	25	94.33	75	130	TRUE
1,1,1-Trichloroethane	23.44	25	93.78	80	120	TRUE
(TAME) tert-Amyl methy ether	24.07	25	96.28	80	130	TRUE
1,1-Dichloropropene	24.14	25	96.57	80	120	TRUE
Carbon tetrachloride	23.65	25	94.60	80	130	TRUE
Benzene	23.24	25	92.96	80	120	TRUE

NL  
3/15/11

Dibromomethane	23.23	25	92.92	80	120	TRUE
1,2-Dichloropropane	22.43	25	89.71	80	120	TRUE
Trichloroethene	22.28	25	89.12	80	120	TRUE
Bromodichloromethane	22.16	25	88.63	80	120	TRUE
2-Chlorovinylethylether	24.18	25	96.72	70	135	TRUE
cis-1,3-Dichloropropene	23.10	25	92.39	80	120	TRUE
4-Methyl-2-pantanone (MIBK)	25.62	25	102.49	60	130	TRUE
trans-1,3-Dichloropropene	24.53	25	98.13	80	125	TRUE
1,1,2-Trichloroethane	22.79	25	91.16	80	120	TRUE
<b>Toluene-d8</b>	24.93	25	99.70	80	120	TRUE
Toluene	22.86	25	91.45	80	120	TRUE
1,3-Dichloropropane	22.73	25	90.90	80	120	TRUE
2-Hexanone	32.36	25	129.46	20	150	TRUE
Dibromochloromethane	23.25	25	93.01	80	120	TRUE
1,2-Dibromoethane	23.20	25	92.78	80	120	TRUE
Tetrachloroethene	23.75	25	95.01	70	130	TRUE
1,1,1,2-Tetrachloroethane	21.98	25	87.92	80	120	TRUE
Chlorobenzene	23.18	25	92.72	80	120	TRUE
Ethylbenzene	23.05	25	92.20	80	120	TRUE
m,p-Xylenes	23.10	25	92.38	60	140	TRUE
Styrene	24.34	25	97.36	80	120	TRUE
o-Xylene	24.78	25	99.14	80	120	TRUE
<b>4-Bromofluorobenzene</b>	23.94	25	95.77	80	120	TRUE
Bromoform	24.19	25	96.76	80	120	TRUE
1,1,2,2-Tetrachloroethane	25.47	25	101.87	80	120	TRUE
1,2,3-Trichloropropane	25.98	25	103.90	70	130	TRUE
Isopropylbenzene	28.02	25	112.07	80	130	TRUE
Bromobenzene	24.82	25	99.26	80	120	TRUE
n-Propylbenzene	26.67	25	106.69	75	130	TRUE
2-Chlorotoluene	24.91	25	99.64	80	120	TRUE
4-Chlorotoluene	25.34	25	101.35	80	120	TRUE
1,3,5-Trimethylbenzene	25.34	25	101.38	80	130	TRUE
tert-Butylbenzene	25.69	25	102.75	80	120	TRUE
1,2,4-Trimethylbenzene	26.22	25	104.88	80	120	TRUE
sec-Butylbenzene	26.03	25	104.13	80	125	TRUE
1,3-Dichlorobenzene	24.26	25	97.03	80	120	TRUE
1,4-Dichlorobenzene	24.90	25	99.58	80	120	TRUE
p-Isopropyltoluene	25.73	25	102.93	80	130	TRUE
1,2-Dichlorobenzene	24.89	25	99.55	80	120	TRUE
n-Butylbenzene	26.01	25	104.03	80	130	TRUE
1,2-Dibromo-3-chloropropane	22.87	25	91.46	50	150	TRUE
1,2,4-Trichlorobenzene	27.26	25	109.05	50	150	TRUE
Naphthalene	27.72	25	110.86	40	150	TRUE
Hexachlorobutadiene	27.85	25	111.42	40	150	TRUE
1,2,3-Trichlorobenzene	27.05	25	108.22	60	140	TRUE

## Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
 Acq On : 14 Mar 2011 6:01 pm Operator: NL  
 Sample : BS/ICV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	TBA-d9	1.000	1.000	0.0	99	0.00
2 T	Ethanol	0.080	0.183	-128.8#	223#	0.00
3 T	tert-Butanol (TBA)	1.108	1.373	-23.9	141	0.00
4 I	Pentafluorobenzene	1.000	1.000	0.0	101	0.00
5 T	Dichlorodifluoromethane	0.916	0.811	11.5	89	0.00
6 P	Chloromethane	0.520	0.458	11.9	103	0.00
7 C	Vinyl chloride	0.556	0.559	0.5	104	0.00
8 T	Bromomethane	0.401	0.386	3.7	93	0.00
9 T	Chloroethane	0.474	0.470	0.8	101	0.00
10 T	Trichlorofluoromethane	1.141	1.273	-11.6	111	0.00
11 T	Acetone	0.124	0.175	-41.1#	164#	0.00
12 T	Iodomethane	0.459	0.673	-46.6#	128	0.00
13 C	1,1-Dichloroethene	0.586	0.593	1.2	107	0.00
14 T	Methylene chloride	0.690	0.642	7.0	100	0.00
15 T	Freon 113	0.734	0.737	-0.4	101	0.00
16 T	Carbon disulfide	1.629	1.586	2.6	111	0.00
17 T	trans-1,2-Dichloroethene	0.664	0.641	3.5	104	0.00
18 T	MTBE	1.192	1.130	5.2	96	0.00
19 P	1,1-Dichloroethane	1.237	1.211	2.1	102	0.00
20 T	Vinyl acetate	0.572	0.842	-47.2#	143	0.00
21 T	n-Hexane	0.122	0.127	-4.1	106	0.00
22 T	2-Butanone (MEK)	0.033	0.039	-18.2	129	0.00
23 T	Diisopropylether (DIPE)	2.259	2.210	2.2	100	0.00
24 T	cis-1,2-dichloroethene	0.712	0.653	8.3	96	0.00
25 T	Bromochloromethane	0.246	0.233	5.3	96	0.00
26 C	Chloroform	1.326	1.237	6.7	99	0.00
27 T	2,2-Dichloropropane	1.066	1.011	5.2	103	0.00
28 T	(ETBE) 2-Ethoxy-2-methyl pr	1.715	1.625	5.2	95	0.00
29 S	Dibromofluoromethane	0.573	0.566	1.2	99	0.00
30 T	1,2-Dichloroethane	0.829	0.782	5.7	97	0.00
31 T	1,1,1-Trichloroethane	1.160	1.088	6.2	97	0.00
32 T	(TAME) tert-Amyl methyl ethe	1.198	1.153	3.8	97	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	104	0.00
34 T	1,1-Dichloropropene	0.621	0.600	3.4	104	0.00
35 T	Carbon tetrachloride	0.657	0.622	5.3	100	0.00
36 T	Benzene	1.566	1.456	7.0	102	0.00
37 T	Dibromomethane	0.230	0.214	7.0	97	0.00
38 C	1,2-Dichloropropane	0.395	0.354	10.4	96	0.00
39 T	Trichloroethene	0.486	0.433	10.9	95	0.00
40 T	Bromodichloromethane	0.614	0.544	11.4	94	0.00
41 T	2-Chlorovinylethylether	0.129	0.125	3.1	97	0.00
42 T	cis-1,3-Dichloropropene	0.600	0.555	7.5	97	0.00
43 T	4-Methyl-2-pentanone (MIBK)	0.195	0.200	-2.6	104	0.00
44 T	trans-1,3-Dichloropropene	0.494	0.485	1.8	100	0.00
45 T	1,1,2-Trichloroethane	0.262	0.239	8.8	96	0.00
46 S	Toluene-d8	1.103	1.099	0.4	103	0.00
47 C	Toluene	0.952	0.870	8.6	99	0.00

(#= Out of Range

03141122.D 031411.M

Tue Mar 15 16:11:57 2011

m  
3/15/11

Page 1

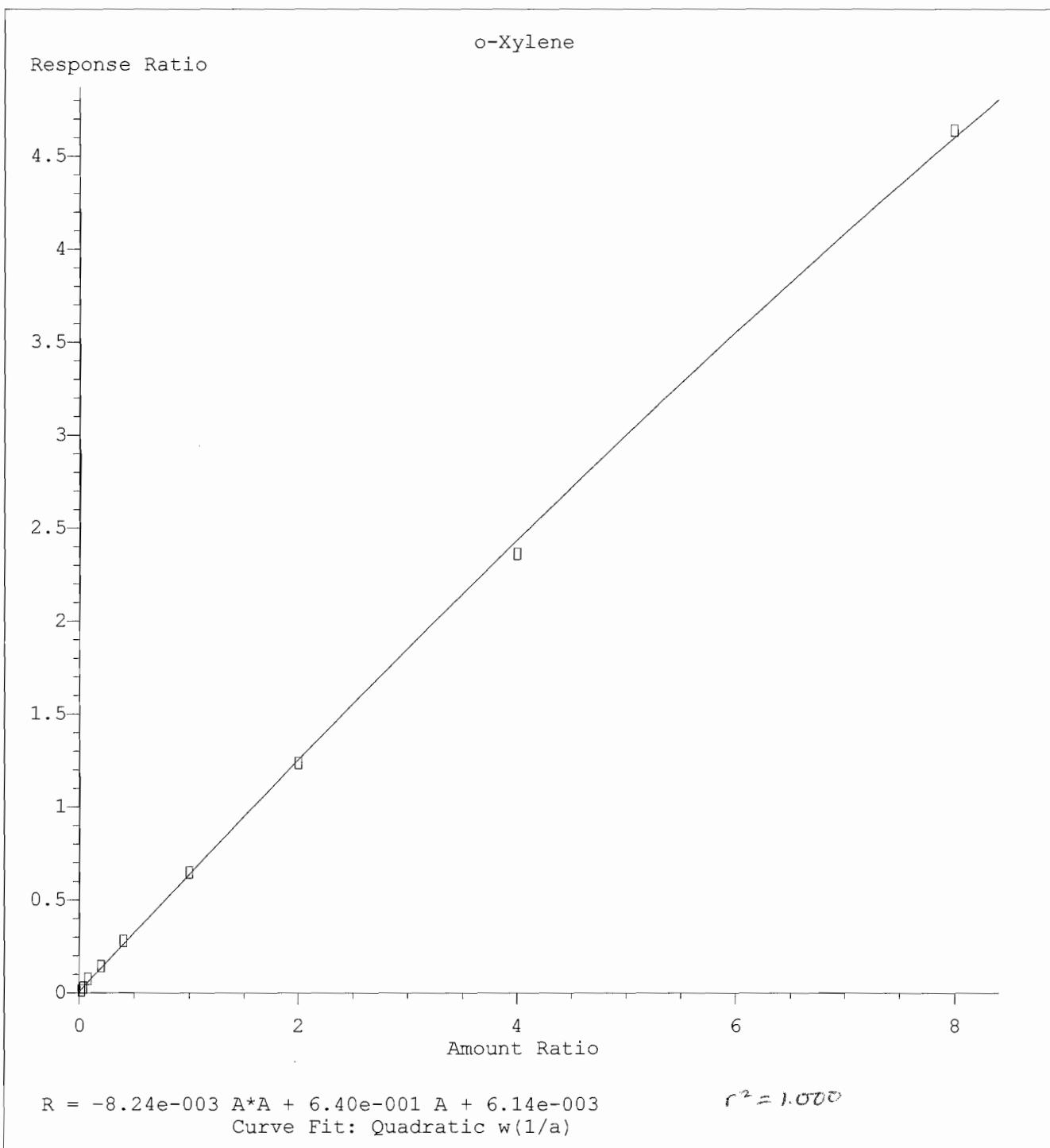
Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141122.D Vial: 2  
 Acq On : 14 Mar 2011 6:01 pm Operator: NL  
 Sample : BS/ICV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,3-Dichloropropane	0.489	0.444	9.2	96	0.00
50 T	2-Hexanone	0.153	0.199	-30.1#	145	0.00
51 T	Dibromochloromethane	0.387	0.360	7.0	96	0.00
52 T	1,2-Dibromoethane	0.295	0.274	7.1	97	0.00
53 T	Tetrachloroethene	0.436	0.414	5.0	105	0.00
54 T	1,1,1,2-Tetrachloroethane	0.447	0.393	12.1	100	0.00
55 P	Chlorobenzene	1.148	1.065	7.2	101	0.00
56 C	Ethylbenzene	2.054	1.894	7.8	98	0.00
57 T	m,p-Xylenes	0.724	0.669	7.6	102	0.00
58 T	Styrene	1.099	1.070	2.6	102	0.00
59 T	o-Xylene	0.692	0.633	8.5	100	0.00
60 S	4-Bromofluorobenzene	0.551	0.528	4.2	100	0.00
61 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
62 P	Bromoform	0.446	0.431	3.4	89	0.00
63 P	1,1,2,2-Tetrachloroethane	0.483	0.492	-1.9	97	0.00
64 T	1,2,3-Trichloropropane	0.140	0.146	-4.3	100	0.00
65 T	Isopropylbenzene	3.211	3.598	-12.1	109	0.00
66 T	Bromobenzene	0.888	0.881	0.8	97	0.00
67 T	n-Propylbenzene	4.160	4.439	-6.7	106	0.00
68 T	2-Chlorotoluene	2.626	2.616	0.4	100	0.00
69 T	4-Chlorotoluene	2.669	2.705	-1.3	102	0.00
70 T	1,3,5-Trimethylbenzene	2.879	2.919	-1.4	101	0.00
71 T	tert-Butylbenzene	2.342	2.407	-2.8	102	0.00
72 T	1,2,4-Trimethylbenzene	2.886	3.026	-4.9	103	0.00
73 T	sec-Butylbenzene	3.690	3.843	-4.1	102	0.00
74 T	1,3-Dichlorobenzene	1.591	1.544	3.0	99	0.00
75 T	1,4-Dichlorobenzene	1.591	1.585	0.4	101	0.00
76 T	p-Isopropyltoluene	2.978	3.065	-2.9	102	0.00
77 T	1,2-Dichlorobenzene	1.392	1.386	0.4	98	0.00
78 T	n-Butylbenzene	2.990	3.111	-4.0	101	0.00
79 T	1,2-Dibromo-3-chloropropane	0.087	0.080	8.0	92	0.00
80 T	1,2,4-Trichlorobenzene	1.129	1.231	-9.0	105	0.00
81 T	Naphthalene	1.316	1.459	-10.9	101	0.00
82 T	Hexachlorobutadiene	0.596	0.664	-11.4	106	0.00
83 T	1,2,3-Trichlorobenzene	0.905	0.980	-8.3	105	0.00



Method Name: C:\HPCHEM\1\GCMS13\METHODS\031411.M  
Calibration Table Last Updated: Mon Mar 14 16:22:34 2011

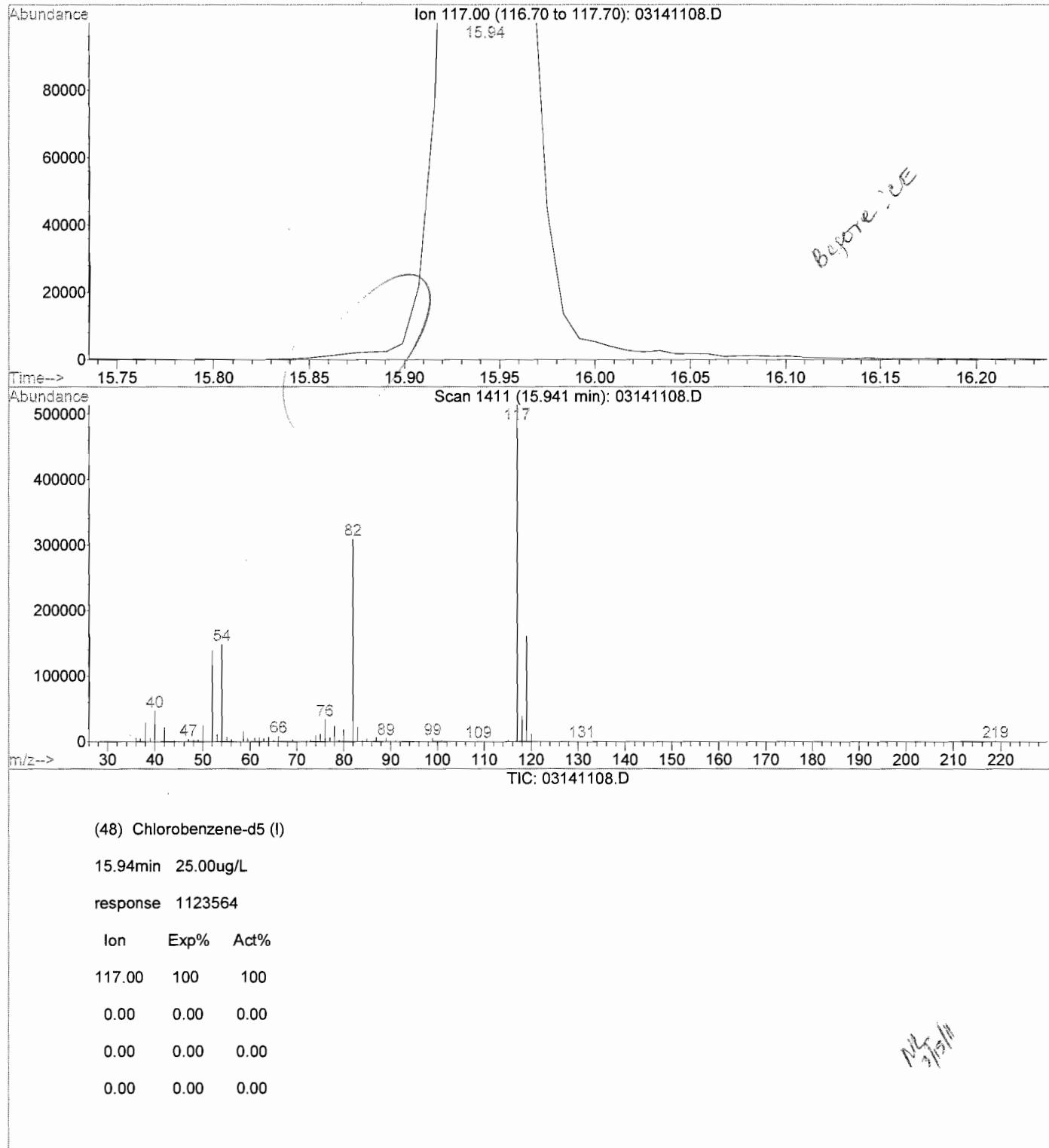
25  
3/15/11

25  
3/15/11

## Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141108.D Vial: 5  
 Acq On : 14 Mar 2011 10:33 am Operator: NL  
 Sample : 0.5 PPB CAL PT Inst : GCMS13  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:27 2011 Quant Results File: temp.res

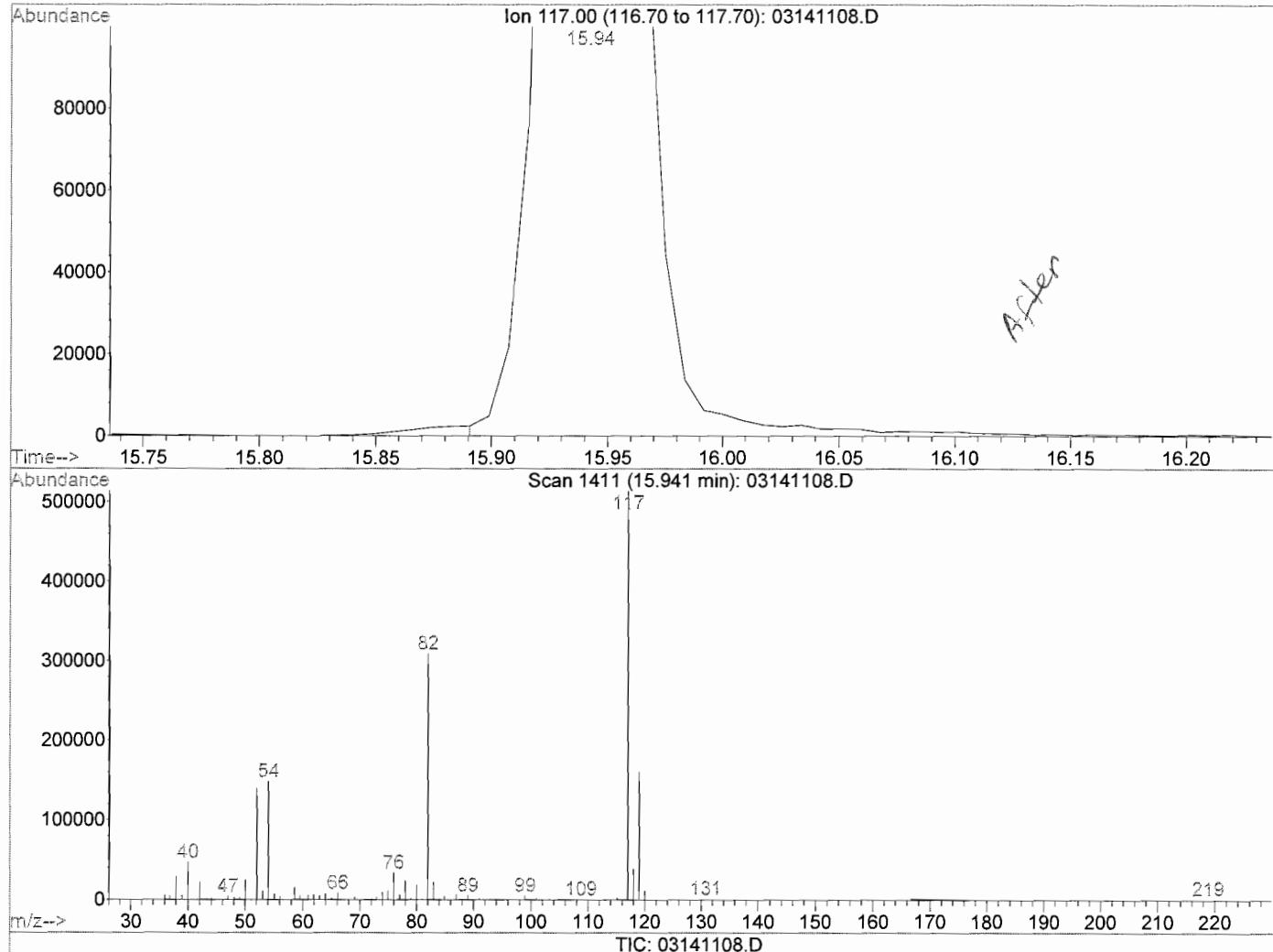
Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141108.D Vial: 5  
 Acq On : 14 Mar 2011 10:33 am Operator: NL  
 Sample : 0.5 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:28 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration



(48) Chlorobenzene-d5 (I)

15.94min 25.00ug/L m

response 1118486

Ion	Exp%	Act%
117.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141108.D Vial: 5  
 Acq On : 14 Mar 2011 10:33 am Operator: NL  
 Sample : 0.5 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:28 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.33	65	155823	200.00	ug/L	0.02
4) Pentafluorobenzene	10.47	168	879567	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1296569	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.94	117	1118486m	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	624163	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	494871	24.54	ug/L	0.00
Spiked Amount	25.000			Recovery	=	98.16%
46) Toluene-d8	13.99	98	1396217	24.42	ug/L	0.00
Spiked Amount	25.000			Recovery	=	97.68%
60) 4-Bromofluorobenzene	17.62	95	632523	25.64	ug/L	0.00
Spiked Amount	25.000			Recovery	=	102.56%

## Target Compounds

				Qvalue
2) Ethanol	5.93	45	554	8.92 ug/L
3) tert-Butanol (TBA)	7.44	59	1698	Below Cal
5) Dichlorodifluoromethane	4.51	85	16104	0.50 ug/L
6) Chloromethane	4.80	50	9667	0.53 ug/L
7) Vinyl chloride	5.10	62	9208	0.47 ug/L
8) Bromomethane	5.68	94	5429	1.17 ug/L
9) Chloroethane	5.89	64	7629	0.46 ug/L
10) Trichlorofluoromethane	6.70	101	19285	0.48 ug/L
11) Acetone	6.88	43	5781	1.33 ug/L
12) Iodomethane	7.48	142	2632	1.92 ug/L
13) 1,1-Dichloroethene	7.42	96	10971	0.53 ug/L
14) Methylene chloride	7.61	84	13077	0.54 ug/L
15) Freon 113	7.68	101	12975	0.50 ug/L
16) Carbon disulfide	7.94	76	33782	0.59 ug/L
17) trans-1,2-Dichloroethene	8.50	96	11772	0.50 ug/L
18) MTBE	8.63	73	19900	0.47 ug/L
19) 1,1-Dichloroethane	8.82	63	20504	0.47 ug/L
20) Vinyl acetate	8.97	43	9755	0.48 ug/L
21) n-Hexane	9.34	86	2173	0.51 ug/L
22) 2-Butanone (MEK)	9.37	72	707	0.61 ug/L
23) Diisopropylether (DIPE)	9.37	45	37882	0.48 ug/L
24) cis-1,2-dichloroethene	9.56	96	12547	0.50 ug/L
25) Bromochloromethane	9.76	128	4023	0.46 ug/L
26) Chloroform	9.82	83	22798	0.49 ug/L
27) 2,2-Dichloropropane	9.93	77	19634	0.52 ug/L
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	27493	0.46 ug/L
30) 1,2-Dichloroethane	10.66	62	13904	0.48 ug/L
31) 1,1,1-Trichloroethane	10.79	97	19365	0.47 ug/L
32) (TAME) tert-Amyl methyl eth	11.50	73	19772	0.47 ug/L
34) 1,1-Dichloropropene	11.03	75	16108	0.50 ug/L
35) Carbon tetrachloride	11.27	117	15491	0.45 ug/L
36) Benzene	11.33	78	40638	0.50 ug/L
37) Dibromomethane	12.05	93	5616	0.47 ug/L
38) 1,2-Dichloropropane	12.09	63	9890	0.48 ug/L
39) Trichloroethene	12.14	95	12969	0.51 ug/L
40) Bromodichloromethane	12.21	83	14786	0.46 ug/L

(#) = qualifier out of range (m) = manual integration

03141108.D 031411.M Tue Mar 15 14:28:21 2011

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3/5/11

M 4/16/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141108.D Vial: 5  
 Acq On : 14 Mar 2011 10:33 am Operator: NL  
 Sample : 0.5 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:28 2011 Quant Results File: 031411.RES

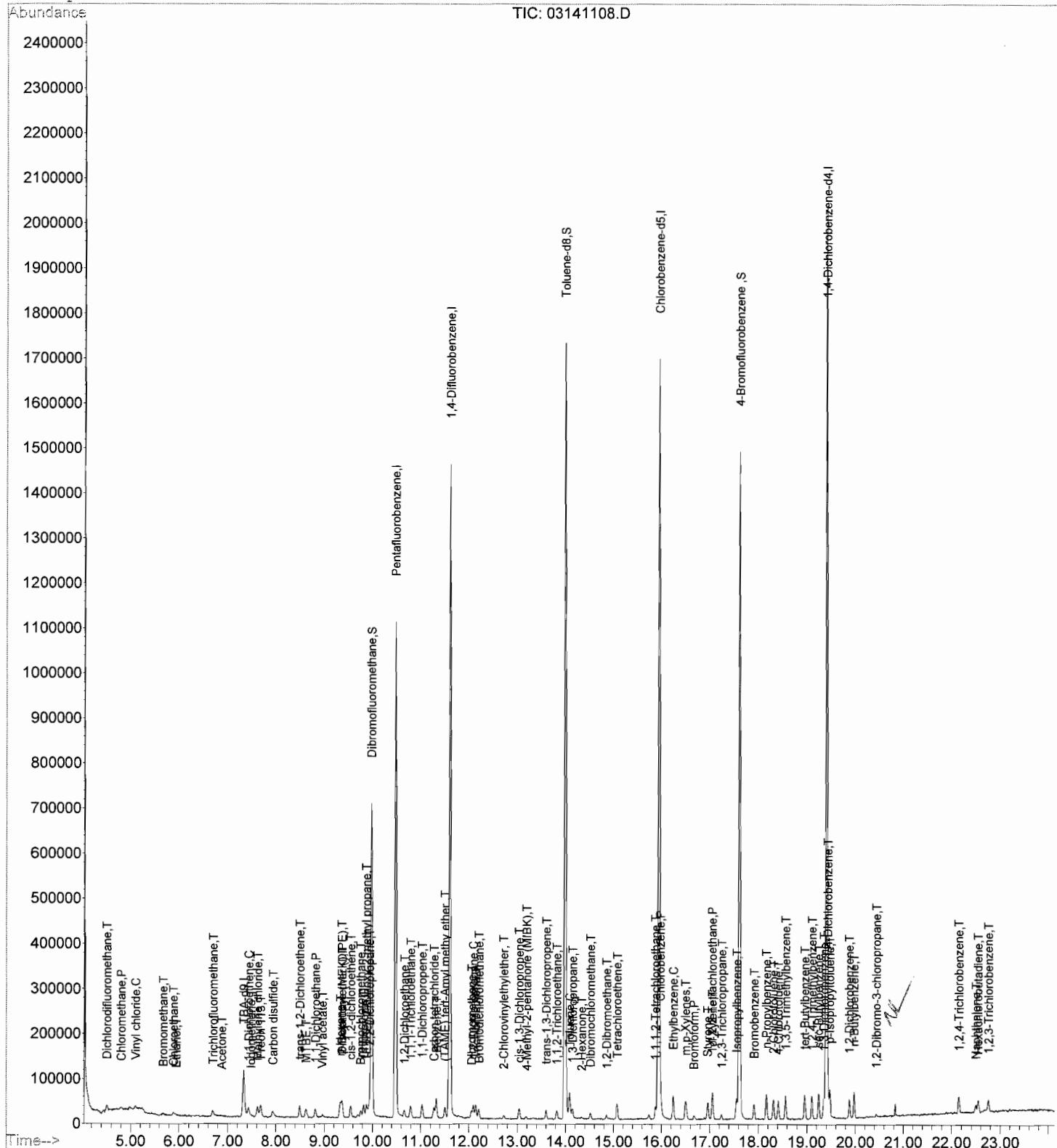
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

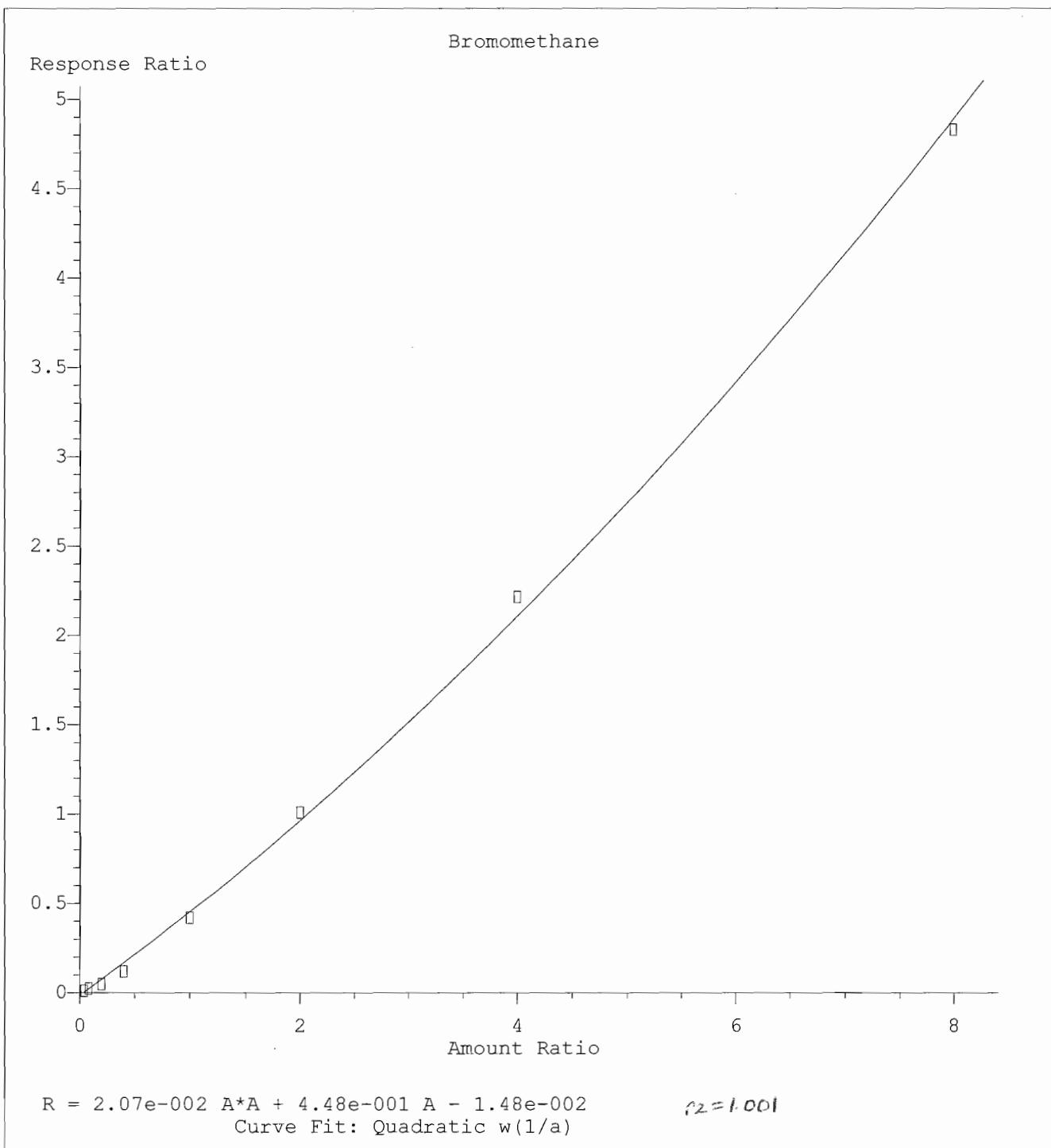
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	3181	0.47	ug/L✓	95
42) cis-1,3-Dichloropropene	13.04	75	14783	0.47	ug/L✓	96
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	4824	0.48	ug/L✓	97
44) trans-1,3-Dichloropropene	13.60	75	11216	0.44	ug/L✓	95
45) 1,1,2-Trichloroethane	13.82	97	6341	0.47	ug/L✓	94
47) Toluene	14.08	92	23238	0.47	ug/L✓	93
49) 1,3-Dichloropropane	14.14	76	10638	0.49	ug/L/#	86
50) 2-Hexanone	14.33	43	3785	0.55	ug/L #	91
51) Dibromochloromethane	14.52	129	7965	0.46	ug/L✓	93
52) 1,2-Dibromoethane	14.85	107	6725	0.51	ug/L✓	94
53) Tetrachloroethene	15.07	164	9968	0.51	ug/L✓	96
54) 1,1,1,2-Tetrachloroethane	15.87	131	12849	0.64	ug/L/#	49
55) Chlorobenzene	15.98	112	26010	0.51	ug/L✓	91
56) Ethylbenzene	16.25	91	45873	0.50	ug/L✓	99
57) m,p-Xylenes	16.51	106	16402	0.51	ug/L✓	94
58) Styrene	16.96	104	22674	0.46	ug/L✓	98
59) o-Xylene	17.06	106	15253	* 0.29	ug/L✓	96
62) Bromoform	16.68	173	4397	0.39	ug/L✓	92
63) 1,1,2,2-Tetrachloroethane	17.04	83	6485	0.54	ug/L #	91
64) 1,2,3-Trichloropropane	17.25	110	1742	0.50	ug/L✓	98
65) Isopropylbenzene	17.56	105	36954	0.46	ug/L✓	99
66) Bromobenzene	17.92	156	11055	0.50	ug/L✓	99
67) n-Propylbenzene	18.17	91	50276	0.48	ug/L✓	100
68) 2-Chlorotoluene	18.31	91	31749	0.48	ug/L✓	100
69) 4-Chlorotoluene	18.41	91	31263	0.47	ug/L✓	98
70) 1,3,5-Trimethylbenzene	18.57	105	33141	0.46	ug/L✓	96
71) tert-Butylbenzene	18.95	119	28395	0.49	ug/L✓	98
72) 1,2,4-Trimethylbenzene	19.10	105	34157	0.47	ug/L✓	96
73) sec-Butylbenzene	19.24	105	44712	0.49	ug/L✓	98
74) 1,3-Dichlorobenzene	19.35	146	19897	0.50	ug/L✓	93
75) 1,4-Dichlorobenzene	19.43	146	20529	0.52	ug/L✓	92
76) p-Isopropyltoluene	19.48	119	37737	0.51	ug/L✓	99
77) 1,2-Dichlorobenzene	19.88	146	17654	0.51	ug/L✓	95
78) n-Butylbenzene	19.97	91	34571	0.46	ug/L✓	99
79) 1,2-Dibromo-3-chloropropan	20.43	75	1633	0.75	ug/L/#	67
80) 1,2,4-Trichlorobenzene	22.15	180	13689	0.49	ug/L✓	93
81) Naphthalene	22.50	128	14868	0.45	ug/L✓	97
82) Hexachlorobutadiene	22.55	225	6055	0.41	ug/L/#	87
83) 1,2,3-Trichlorobenzene	22.76	180	10973	0.49	ug/L✓	98

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141108.D Vial: 5  
Acq On : 14 Mar 2011 10:33 am Operator: NL  
Sample : 0.5 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:28 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration





Method Name: C:\HPCHEM\1\GCMS13\METHODS\031411.M  
 Calibration Table Last Updated: Mon Mar 14 16:22:34 2011

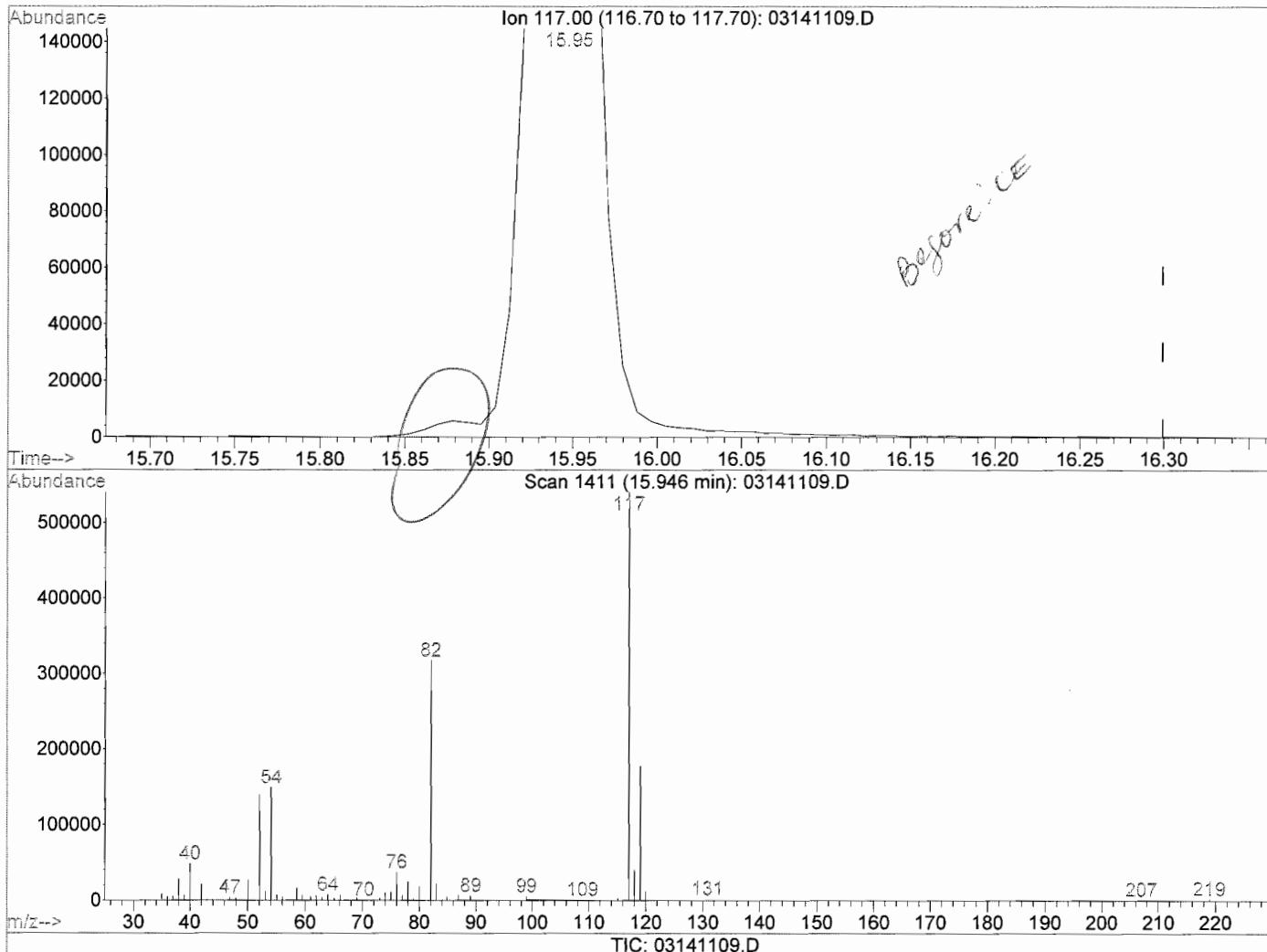
3/15/11

(3) 3/15/11

## Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141109.D Vial: 6  
 Acq On : 14 Mar 2011 11:06 am Operator: NL  
 Sample : 1.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:28 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration



(48) Chlorobenzene-d5 (l)

15.95min 25.00ug/L

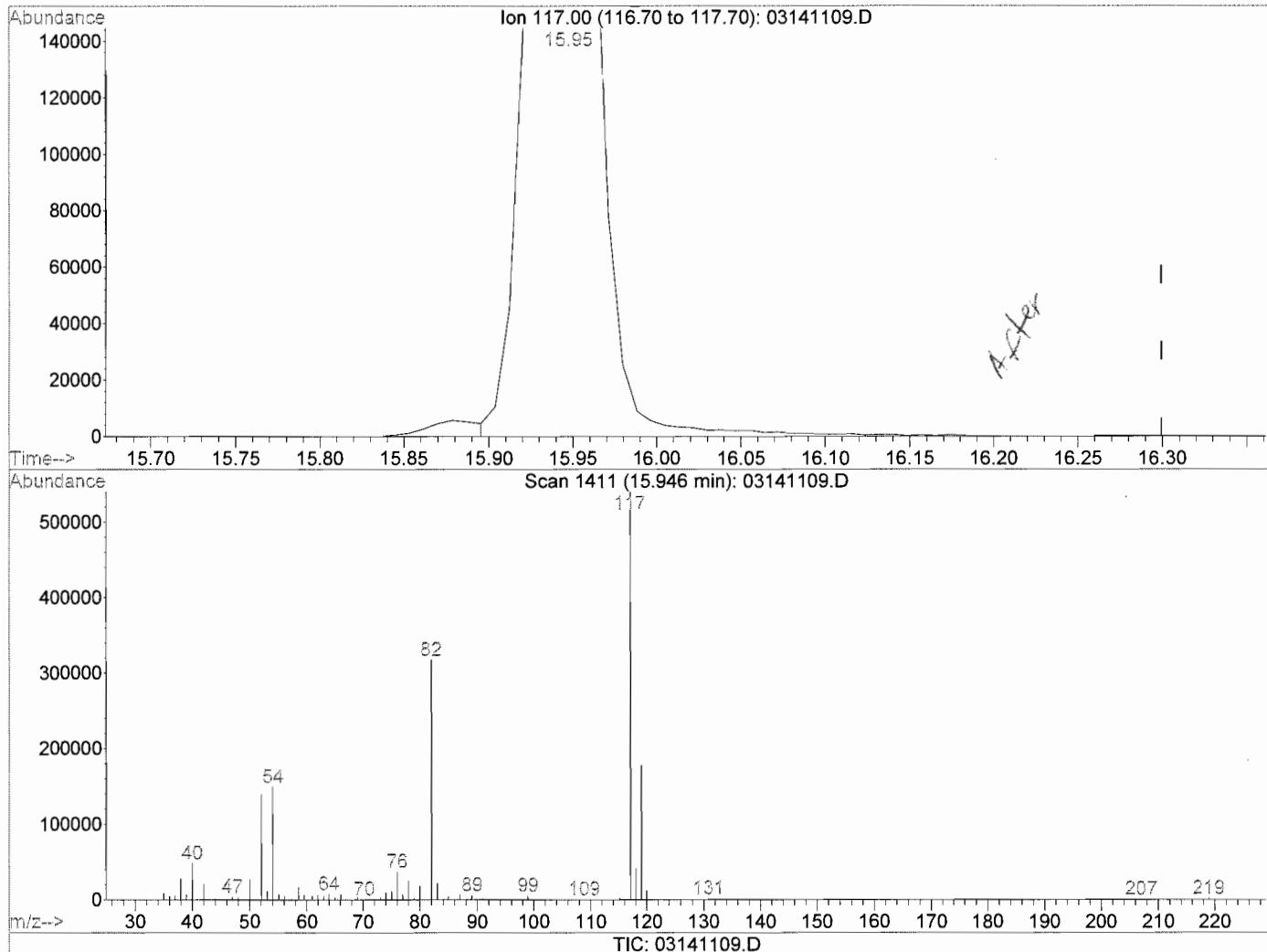
response 1174140

Ion	Exp%	Act%
117.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141109.D Vial: 6  
 Acq On : 14 Mar 2011 11:06 am Operator: NL  
 Sample : 1.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:29 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration



(48) Chlorobenzene-d5 (I)

15.95min 25.00ug/L m

response 1161807

Ion	Exp%	Act%
117.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141109.D Vial: 6  
 Acq On : 14 Mar 2011 11:06 am Operator: NL  
 Sample : 1.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.32	65	163525	200.00	ug/L	0.01
4) Pentafluorobenzene	10.48	168	922360	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1341500	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	1161807m	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	656554	25.00	ug/L	-0.01

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	511715	24.20	ug/L	0.00
Spiked Amount	25.000		Recovery	=	96.80%	
46) Toluene-d8	13.99	98	1439541	24.33	ug/L	0.00
Spiked Amount	25.000		Recovery	=	97.32%	
60) 4-Bromofluorobenzene	17.62	95	651071	25.40	ug/L	0.00
Spiked Amount	25.000		Recovery	=	101.60%	

## Target Compounds

				Qvalue		
2) Ethanol	5.91	45	1382	21.20	ug/L	94
3) tert-Butanol (TBA)	7.43	59	5161	1.41	ug/L	100
5) Dichlorodifluoromethane	4.50	85	30732	0.91	ug/L	96
6) Chloromethane	4.80	50	18061	0.94	ug/L	93
7) Vinyl chloride	5.09	62	18944	0.92	ug/L	80
8) Bromomethane	5.69	94	10522	* 1.46	ug/L	100
9) Chloroethane	5.89	64	16939	0.97	ug/L	95
10) Trichlorofluoromethane	6.70	101	37937	0.90	ug/L	98
11) Acetone	6.86	43	5576	1.22	ug/L	74
12) Iodomethane	7.47	142	8584	2.18	ug/L	82
13) 1,1-Dichloroethene	7.42	96	19437	0.90	ug/L	97
14) Methylene chloride	7.61	84	26278	1.03	ug/L	99
15) Freon 113	7.68	101	25302	0.93	ug/L	95
16) Carbon disulfide	7.94	76	60995	1.02	ug/L	95
17) trans-1,2-Dichloroethene	8.49	96	22356	0.91	ug/L	98
18) MTBE	8.63	73	41710	0.95	ug/L	97
19) 1,1-Dichloroethane	8.82	63	44289	0.97	ug/L	99
20) Vinyl acetate	8.98	43	20648	0.98	ug/L	99
21) n-Hexane	9.32	86	4597	1.02	ug/L	91
22) 2-Butanone (MEK)	9.36	72	1170	0.96	ug/L	98
23) Diisopropylether (DIPE)	9.36	45	87611	1.05	ug/L	98
24) cis-1,2-dichloroethene	9.55	96	24956	0.95	ug/L	99
25) Bromochloromethane	9.76	128	8986	0.99	ug/L	85
26) Chloroform	9.82	83	47855	0.98	ug/L	99
27) 2,2-Dichloropropane	9.93	77	39501	1.00	ug/L	98
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	62766	0.99	ug/L	97
30) 1,2-Dichloroethane	10.66	62	29939	0.98	ug/L	99
31) 1,1,1-Trichloroethane	10.80	97	39206	0.92	ug/L	94
32) (TAME) tert-Amyl methyl eth	11.50	73	43031	0.97	ug/L	98
34) 1,1-Dichloropropene	11.03	75	31960	0.96	ug/L	98
35) Carbon tetrachloride	11.27	117	32401	0.92	ug/L	99
36) Benzene	11.32	78	81624	0.97	ug/L	99
37) Dibromomethane	12.05	93	11887	0.96	ug/L	95
38) 1,2-Dichloropropane	12.09	63	20550	0.97	ug/L	86
39) Trichloroethene	12.14	95	25397	0.97	ug/L	99
40) Bromodichloromethane	12.21	83	30659	0.93	ug/L	100

(#) = qualifier out of range (m) = manual integration

03141109.D 031411.M Tue Mar 15 14:29:20 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141109.D Vial: 6  
 Acq On : 14 Mar 2011 11:06 am Operator: NL  
 Sample : 1.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

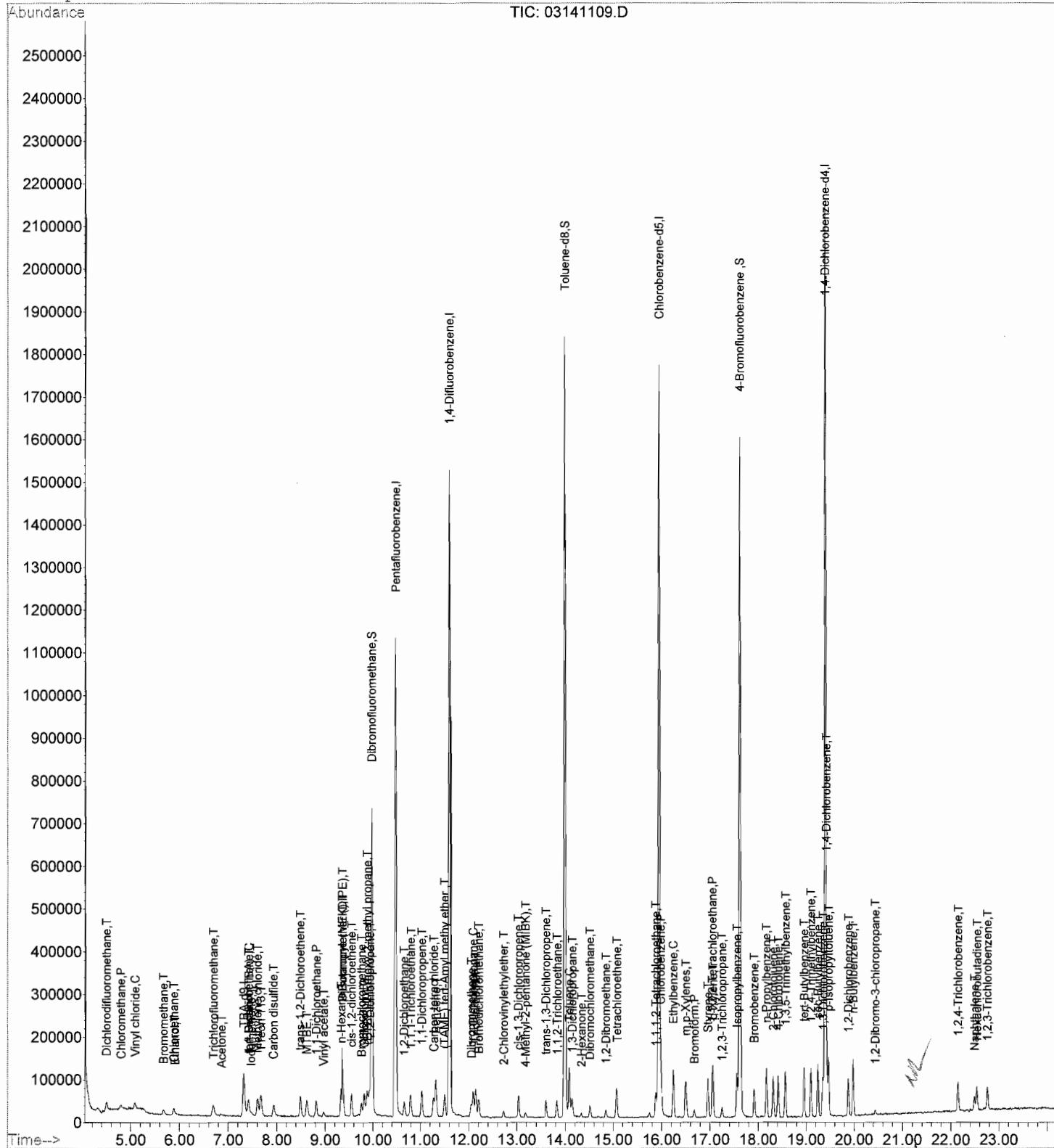
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.72	63	6316	0.91	ug/L✓	93
42) cis-1,3-Dichloropropene	13.03	75	30586	0.95	ug/L✓	98
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	9919	0.95	ug/L✓	94
44) trans-1,3-Dichloropropene	13.60	75	24804	0.94	ug/L✓	94
45) 1,1,2-Trichloroethane	13.83	97	13697	0.98	ug/L	98
47) Toluene	14.08	92	51724	1.01	ug/L	98
49) 1,3-Dichloropropane	14.14	76	23878	1.05	ug/L	95
50) 2-Hexanone	14.33	43	7442	1.04	ug/L #	88
51) Dibromochloromethane	14.52	129	15956	0.89	ug/L	98
52) 1,2-Dibromoethane	14.85	107	13364	0.98	ug/L	100
53) Tetrachloroethene	15.08	164	20940	1.03	ug/L	93
54) 1,1,1,2-Tetrachloroethane	15.88	131	20465	0.99	ug/L	91
55) Chlorobenzene	15.99	112	55554	1.04	ug/L #	81
56) Ethylbenzene	16.24	91	98106	1.03	ug/L	99
57) m,p-Xylenes	16.50	106	34501	1.03	ug/L	98
58) Styrene	16.96	104	50145	0.98	ug/L	98
59) o-Xylene	17.06	106	33764	0.90	ug/L	99
62) Bromoform	16.68	173	10070	0.86	ug/L	87
63) 1,1,2,2-Tetrachloroethane	17.04	83	12898	1.02	ug/L #	93
64) 1,2,3-Trichloropropene	17.25	110	3454	0.94	ug/L	96
65) Isopropylbenzene	17.56	105	83225	0.99	ug/L	99
66) Bromobenzene	17.91	156	22567	0.97	ug/L	99
67) n-Propylbenzene	18.17	91	107954	0.99	ug/L	98
68) 2-Chlorotoluene	18.31	91	69416	1.01	ug/L	100
69) 4-Chlorotoluene	18.42	91	72338	1.03	ug/L	100
70) 1,3,5-Trimethylbenzene	18.57	105	75804	1.00	ug/L	100
71) tert-Butylbenzene	18.96	119	61061	0.99	ug/L	99
72) 1,2,4-Trimethylbenzene	19.10	105	74433	0.98	ug/L	97
73) sec-Butylbenzene	19.25	105	94039	0.97	ug/L	100
74) 1,3-Dichlorobenzene	19.35	146	43178	1.03	ug/L	97
75) 1,4-Dichlorobenzene	19.43	146	44611	1.07	ug/L #	91
76) p-Isopropyltoluene	19.47	119	78344	1.00	ug/L	98
77) 1,2-Dichlorobenzene	19.88	146	36641	1.00	ug/L	98
78) n-Butylbenzene	19.98	91	77186	0.98	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.44	75	1968	0.86	ug/L	87
80) 1,2,4-Trichlorobenzene	22.15	180	28151	0.95	ug/L✓	94
81) Naphthalene	22.49	128	31633	0.92	ug/L	100
82) Hexachlorobutadiene	22.54	225	15443	0.99	ug/L✓	94
83) 1,2,3-Trichlorobenzene	22.76	180	22752	0.96	ug/L✓	99

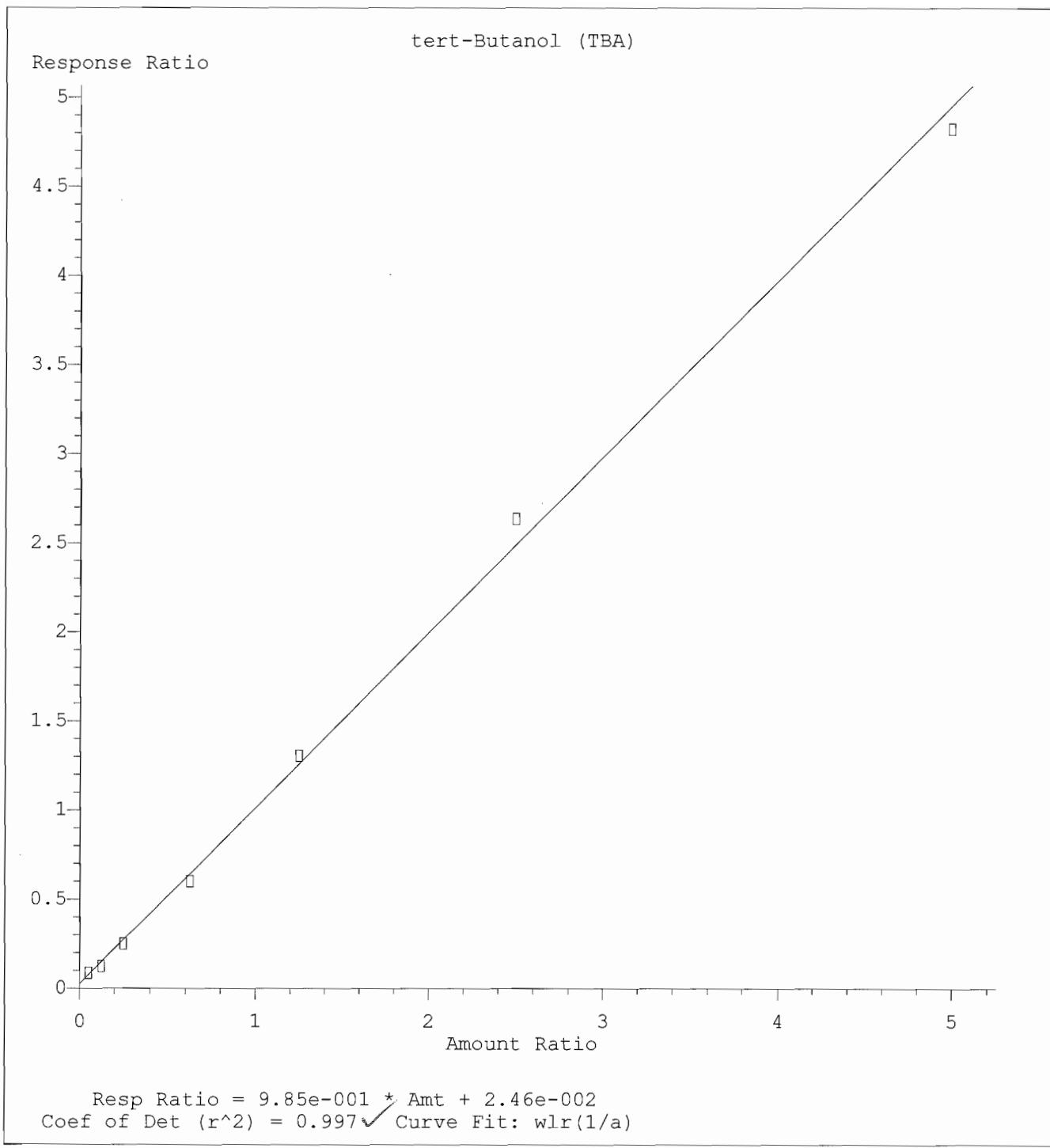
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## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141109.D Vial: 6  
Acq On : 14 Mar 2011 11:06 am Operator: NL  
Sample : 1.0 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration

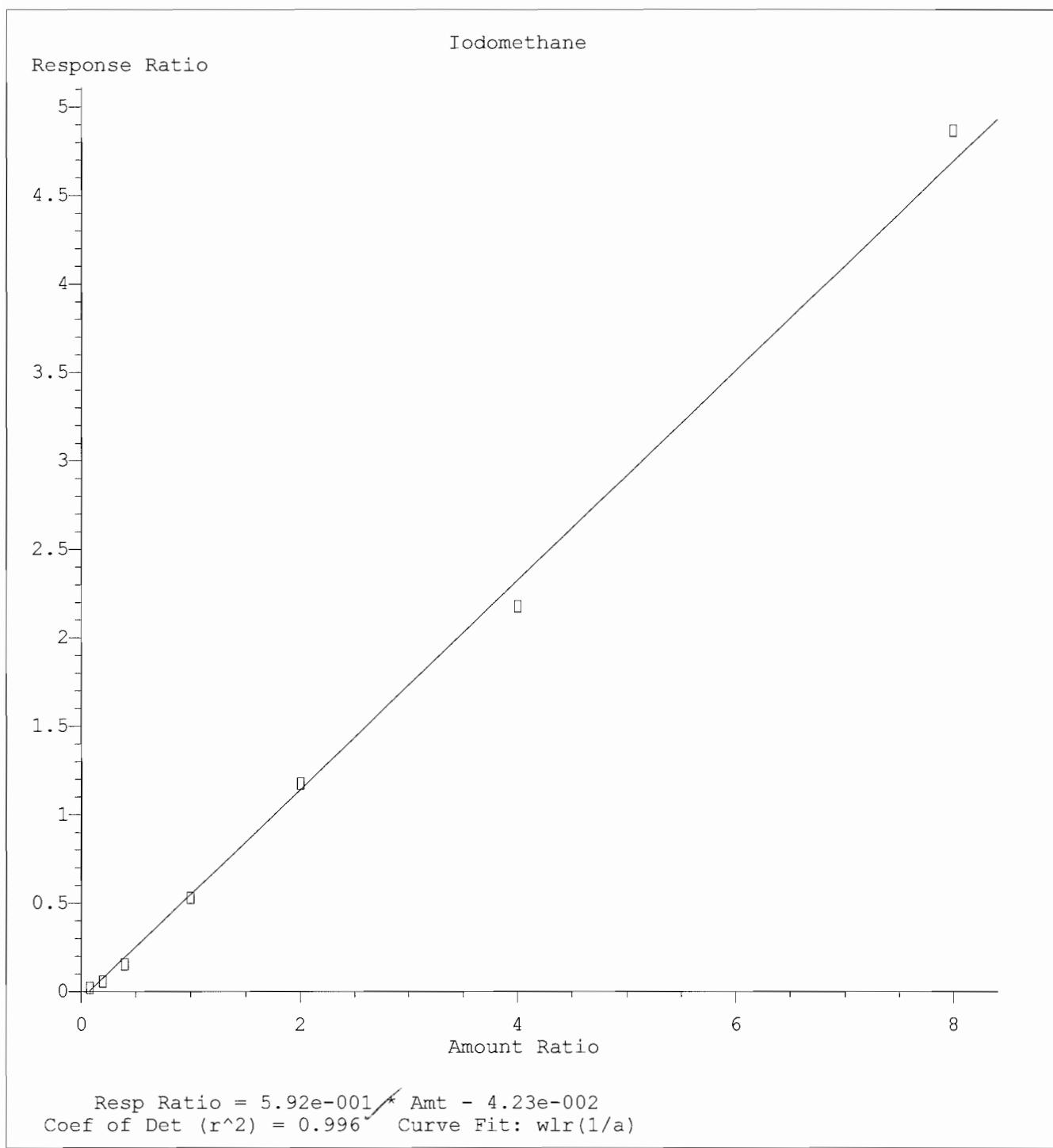




Method Name: C:\HPCHEM\1\GCMS13\METHODS\031411.M  
Calibration Table Last Updated: Mon Mar 14 16:22:34 2011

NL  
3/15/11

M  
4/16/11



Method Name: C:\HPCHEM\1\GCMS13\METHODS\031411.M  
Calibration Table Last Updated: Mon Mar 14 16:22:34 2011

4/23/11  
M 3/16/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141111.D Vial: 8  
 Acq On : 14 Mar 2011 12:14 pm Operator: NL  
 Sample : 2.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	118356	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	711317	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1057424	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.94	117	932115	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	524222	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	415304	25.46	ug/L	0.00
Spiked Amount	25.000			Recovery	=	101.84%
46) Toluene-d8	13.98	98	1156864	24.81	ug/L	0.00
Spiked Amount	25.000			Recovery	=	99.24%
60) 4-Bromofluorobenzene	17.62	95	527208	25.64	ug/L	0.00
Spiked Amount	25.000			Recovery	=	102.56%

## Target Compounds

				Qvalue
2) Ethanol	5.93	45	2666	56.51 ug/L 76
3) tert-Butanol (TBA)	7.42	59	10211	12.52 ug/L # 89
5) Dichlorodifluoromethane	4.47	85	53625	2.06 ug/L 98
6) Chloromethane	4.78	50	32657	2.21 ug/L 91
7) Vinyl chloride	5.07	62	37358	2.36 ug/L # 82
8) Bromomethane	5.66	94	17100	2.16 ug/L 82
9) Chloroethane	5.87	64	35588	2.64 ug/L 99
10) Trichlorofluoromethane	6.68	101	68707	2.12 ug/L 95
11) Acetone	6.84	43	13114	3.72 ug/L 92
12) Iodomethane	7.47	142	15441	* 2.71 ug/L # 86
13) 1,1-Dichloroethene	7.41	96	39307	2.36 ug/L 97
14) Methylene chloride	7.60	84	47605	2.42 ug/L 99
15) Freon 113	7.66	101	41898	2.01 ug/L 97
16) Carbon disulfide	7.93	76	119287	2.57 ug/L 98
17) trans-1,2-Dichloroethene	8.48	96	50567	2.68 ug/L 99
18) MTBE	8.62	73	68393	2.02 ug/L 96
19) 1,1-Dichloroethane	8.80	63	90989	2.59 ug/L 96
20) Vinyl acetate	8.95	43	32801	2.01 ug/L 97
21) n-Hexane	9.32	86	7296	2.10 ug/L 90
22) 2-Butanone (MEK)	9.35	72	2282	2.43 ug/L # 70
23) Diisopropylether (DIPE)	9.36	45	154386	2.40 ug/L 99
24) cis-1,2-dichloroethene	9.55	96	52692	2.60 ug/L 97
25) Bromochloromethane	9.76	128	15165	2.17 ug/L 91
26) Chloroform	9.82	83	98924	2.62 ug/L 98
27) 2,2-Dichloropropane	9.92	77	82629	2.72 ug/L 95
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	108864	2.23 ug/L 99
30) 1,2-Dichloroethane	10.66	62	52451	2.22 ug/L 99
31) 1,1,1-Trichloroethane	10.79	97	82372	2.50 ug/L 99
32) (TAME) tert-Amyl methyl eth	11.50	73	72398	2.12 ug/L # 97
34) 1,1-Dichloropropene	11.02	75	62603	2.38 ug/L 98
35) Carbon tetrachloride	11.27	117	65324	2.35 ug/L 99
36) Benzene	11.32	78	170501	2.57 ug/L 99
37) Dibromomethane	12.04	93	21366	2.19 ug/L 96
38) 1,2-Dichloropropene	12.09	63	42314	2.54 ug/L 98
39) Trichloroethene	12.14	95	51563	2.51 ug/L 98
40) Bromodichloromethane	12.20	83	60974	2.35 ug/L 99

(#) = qualifier out of range (m) = manual integration

03141111.D 031411.M Tue Mar 15 14:30:26 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141111.D Vial: 8  
 Acq On : 14 Mar 2011 12:14 pm Operator: NL  
 Sample : 2.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

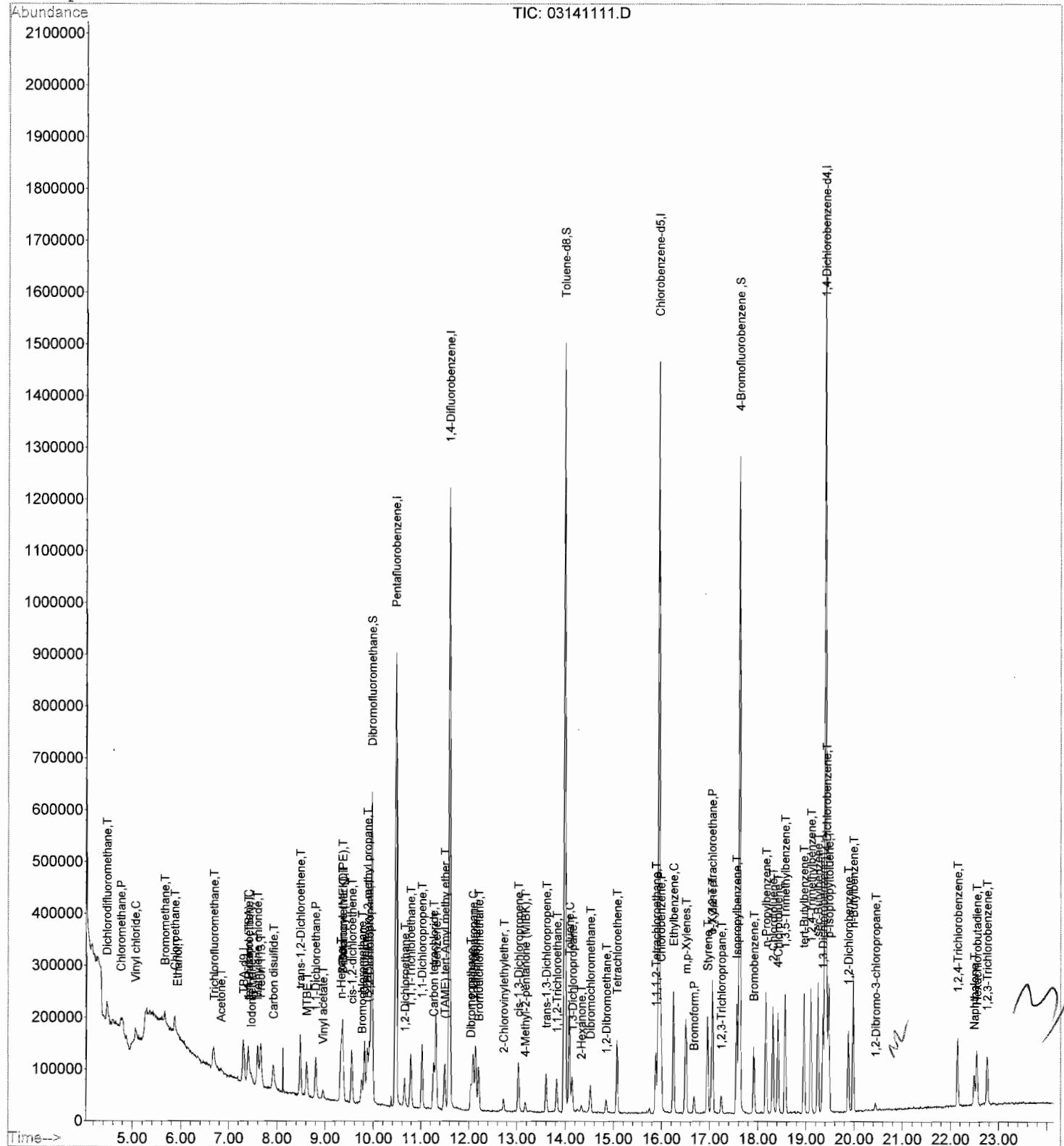
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	10374	1.90	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	59645	2.35	ug/L	97
43) 4-Methyl-2-pantanone (MIBK)	13.17	43	16382	1.99	ug/L	98
44) trans-1,3-Dichloropropene	13.60	75	45501	2.18	ug/L	96
45) 1,1,2-Trichloroethane	13.82	97	24061	2.17	ug/L	95
47) Toluene	14.08	92	105845	2.63	ug/L	99
49) 1,3-Dichloropropane	14.14	76	39874	2.19	ug/L	94
50) 2-Hexanone	14.33	43	12588	2.20	ug/L	#
51) Dibromochloromethane	14.52	129	31703	2.20	ug/L	96
52) 1,2-Dibromoethane	14.84	107	21699	1.97	ug/L	97
53) Tetrachloroethene	15.07	164	40249	2.48	ug/L	98
54) 1,1,1,2-Tetrachloroethane	15.87	131	39605	2.38	ug/L	95
55) Chlorobenzene	15.99	112	109100	2.55	ug/L	92
56) Ethylbenzene	16.25	91	203956	2.66	ug/L	99
57) m,p-Xylenes	16.51	106	71329	2.64	ug/L	100
58) Styrene	16.96	104	102326	2.50	ug/L	98
59) o-Xylene	17.06	106	71297	2.75	ug/L	100
62) Bromoform	16.68	173	19630	2.10	ug/L	95
63) 1,1,2,2-Tetrachloroethane	17.05	83	21130	2.09	ug/L	#
64) 1,2,3-Trichloropropene	17.25	110	5768	1.96	ug/L	98
65) Isopropylbenzene	17.56	105	171913	2.55	ug/L	99
66) Bromobenzene	17.92	156	44118	2.37	ug/L	98
67) n-Propylbenzene	18.17	91	224077	2.57	ug/L	99
68) 2-Chlorotoluene	18.31	91	141164	2.56	ug/L	100
69) 4-Chlorotoluene	18.41	91	146784	2.62	ug/L	99
70) 1,3,5-Trimethylbenzene	18.57	105	155498	2.58	ug/L	98
71) tert-Butylbenzene	18.96	119	125198	2.55	ug/L	99
72) 1,2,4-Trimethylbenzene	19.11	105	158655	2.62	ug/L	97
73) sec-Butylbenzene	19.25	105	197903	2.56	ug/L	100
74) 1,3-Dichlorobenzene	19.35	146	83448	2.50	ug/L	99
75) 1,4-Dichlorobenzene	19.43	146	84260	2.53	ug/L	95
76) p-Isopropyltoluene	19.48	119	159587	2.56	ug/L	99
77) 1,2-Dichlorobenzene	19.88	146	68995	2.36	ug/L	99
78) n-Butylbenzene	19.98	91	159253	2.54	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.45	75	4340	2.37	ug/L	#
80) 1,2,4-Trichlorobenzene	22.15	180	52445	2.21	ug/L	98
81) Naphthalene	22.50	128	55232	2.00	ug/L	99
82) Hexachlorobutadiene	22.55	225	29126	2.33	ug/L	97
83) 1,2,3-Trichlorobenzene	22.76	180	40091	2.11	ug/L	96

*M**2*

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141111.D Vial: 8  
Acq On : 14 Mar 2011 12:14 pm Operator: NL  
Sample : 2.0 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:29 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141112.D Vial: 9  
 Acq On : 14 Mar 2011 12:47 pm Operator: NL  
 Sample : 5.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:30 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	119477	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	700842	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1010249	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.94	117	912659	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	512889	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	399936	24.89	ug/L	0.00
Spiked Amount	25.000			Recovery	=	99.56%
46) Toluene-d8	13.98	98	1120128	25.14	ug/L	0.00
Spiked Amount	25.000			Recovery	=	100.56%
60) 4-Bromofluorobenzene	17.62	95	522172	25.94	ug/L	0.00
Spiked Amount	25.000			Recovery	=	103.76%

## Target Compounds

				Qvalue
2) Ethanol	5.92	45	3140	65.94 ug/L 90
3) tert-Butanol (TBA)	7.42	59	14934	20.38 ug/L 98
5) Dichlorodifluoromethane	4.47	85	132238	5.15 ug/L 99
6) Chloromethane	4.78	50	67751	4.65 ug/L 100
7) Vinyl chloride	5.06	62	78989	5.07 ug/L 98
8) Bromomethane	5.66	94	34058	3.52 ug/L 94
9) Chloroethane	5.87	64	66878	5.04 ug/L 99
10) Trichlorofluoromethane	6.68	101	158969	4.97 ug/L 97
11) Acetone	6.84	43	19542	5.63 ug/L 94
12) Iodomethane	7.46	142	40011	4.20 ug/L 98
13) 1,1-Dichloroethene	7.40	96	79543	4.84 ug/L 97
14) Methylene chloride	7.60	84	93284	4.82 ug/L 98
15) Freon 113	7.66	101	102564	4.99 ug/L 99
16) Carbon disulfide	7.93	76	209886	4.60 ug/L 97
17) trans-1,2-Dichloroethene	8.48	96	86712	4.66 ug/L 96
18) MTBE	8.62	73	163820	4.90 ug/L 99
19) 1,1-Dichloroethane	8.80	63	170592	4.92 ug/L 100
20) Vinyl acetate	8.96	43	70756	4.41 ug/L 97
21) n-Hexane	9.32	86	19167	5.60 ug/L 90
22) 2-Butanone (MEK)	9.37	72	4329	4.68 ug/L # 89
23) Diisopropylether (DIPE)	9.36	45	315084	4.98 ug/L 98
24) cis-1,2-dichloroethene	9.55	96	96449	4.83 ug/L 98
25) Bromochloromethane	9.76	128	34136	4.95 ug/L 94
26) Chloroform	9.82	83	184540	4.97 ug/L 99
27) 2,2-Dichloropropane	9.92	77	144350	4.83 ug/L 99
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	240191	5.00 ug/L 98
30) 1,2-Dichloroethane	10.66	62	115992	4.99 ug/L 98
31) 1,1,1-Trichloroethane	10.79	97	161470	4.96 ug/L 99
32) (TAME) tert-Amyl methy eth	11.50	73	166151	4.95 ug/L 98
34) 1,1-Dichloropropene	11.02	75	125801	5.01 ug/L 98
35) Carbon tetrachloride	11.27	117	133490	5.02 ug/L 99
36) Benzene	11.32	78	313868	4.96 ug/L 99
37) Dibromomethane	12.04	93	48242	5.18 ug/L 97
38) 1,2-Dichloropropene	12.09	63	79915	5.01 ug/L 98
39) Trichloroethene	12.14	95	95797	4.88 ug/L 99
40) Bromodichloromethane	12.20	83	124593	5.03 ug/L 99

(#) = qualifier out of range (m) = manual integration

03141112.D 031411.M Tue Mar 15 14:31:12 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141112.D Vial: 9  
 Acq On : 14 Mar 2011 12:47 pm Operator: NL  
 Sample : 5.0 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:30 2011 Quant Results File: 031411.RES

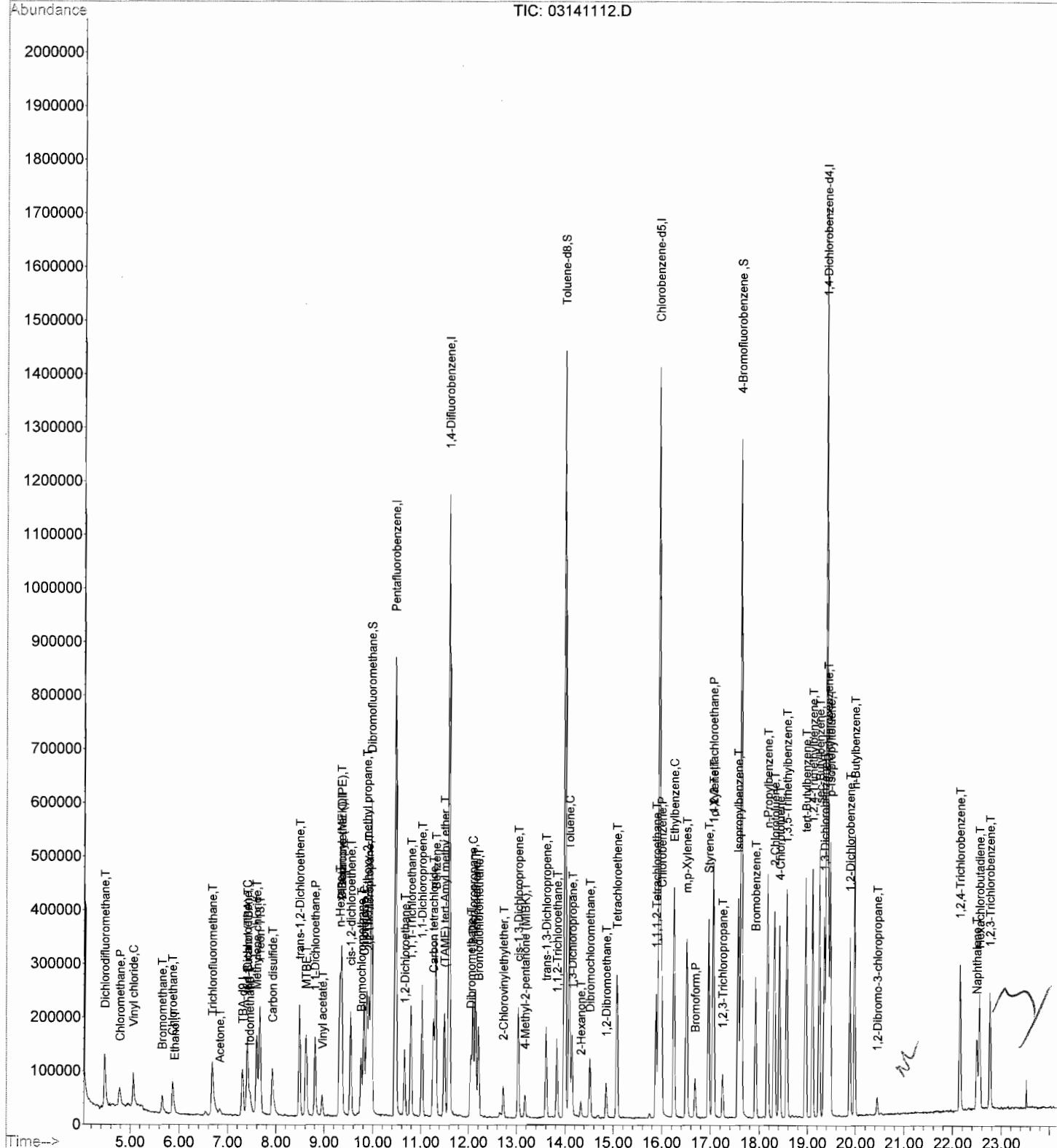
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	26466	5.07	ug/L	94
42) cis-1,3-Dichloropropene	13.04	75	119204	4.91	ug/L	97
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	38199	4.85	ug/L	93
44) trans-1,3-Dichloropropene	13.60	75	101199	5.07	ug/L	98
45) 1,1,2-Trichloroethane	13.82	97	54108	5.12	ug/L	95
47) Toluene	14.08	92	199361	5.18	ug/L	100
49) 1,3-Dichloropropane	14.14	76	90676	5.08	ug/L	96
50) 2-Hexanone	14.33	43	27301	4.87	ug/L	# 92
51) Dibromochloromethane	14.52	129	71389	5.05	ug/L	97
52) 1,2-Dibromoethane	14.85	107	54007	5.02	ug/L	99
53) Tetrachloroethene	15.07	164	79084	4.97	ug/L	98
54) 1,1,1,2-Tetrachloroethane	15.88	131	78844	4.84	ug/L	96
55) Chlorobenzene	15.99	112	203846	4.86	ug/L	97
56) Ethylbenzene	16.25	91	375480	5.01	ug/L	99
57) m,p-Xylenes	16.51	106	132725	5.02	ug/L	98
58) Styrene	16.96	104	206281	5.14	ug/L	99
59) o-Xylene	17.06	106	132259	5.43	ug/L	97
62) Bromoform	16.68	173	44364	4.85	ug/L	96
63) 1,1,2,2-Tetrachloroethane	17.05	83	50521	5.10	ug/L	99
64) 1,2,3-Trichloropropene	17.25	110	14617	5.08	ug/L	89
65) Isopropylbenzene	17.56	105	331110	5.03	ug/L	100
66) Bromobenzene	17.92	156	90165	4.95	ug/L	97
67) n-Propylbenzene	18.17	91	437726	5.13	ug/L	99
68) 2-Chlorotoluene	18.31	91	274225	5.09	ug/L	99
69) 4-Chlorotoluene	18.42	91	277589	5.07	ug/L	100
70) 1,3,5-Trimethylbenzene	18.57	105	298450	5.05	ug/L	98
71) tert-Butylbenzene	18.96	119	239085	4.98	ug/L	99
72) 1,2,4-Trimethylbenzene	19.11	105	302101	5.10	ug/L	99
73) sec-Butylbenzene	19.25	105	390838	5.16	ug/L	99
74) 1,3-Dichlorobenzene	19.35	146	169519	5.19	ug/L	99
75) 1,4-Dichlorobenzene	19.43	146	161637	4.95	ug/L	97
76) p-Isopropyltoluene	19.48	119	310372	5.08	ug/L	99
77) 1,2-Dichlorobenzene	19.88	146	145493	5.10	ug/L	98
78) n-Butylbenzene	19.98	91	314041	5.12	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.45	75	8572	4.78	ug/L	96
80) 1,2,4-Trichlorobenzene	22.15	180	108929	4.70	ug/L	100
81) Naphthalene	22.50	128	128076	4.74	ug/L	100
82) Hexachlorobutadiene	22.55	225	59115	4.84	ug/L	97
83) 1,2,3-Trichlorobenzene	22.76	180	91278	4.91	ug/L	98

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141112.D Vial: 9  
Acq On : 14 Mar 2011 12:47 pm Operator: NL  
Sample : 5.0 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:30 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141114.D Vial: 11  
 Acq On : 14 Mar 2011 1:53 pm Operator: NL  
 Sample : 25 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:31 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.31	65	125792	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	699455	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1014981	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	936018	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	492554	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	404401	25.22	ug/L	0.00
Spiked Amount	25.000		Recovery	=	100.88%	
46) Toluene-d8	13.99	98	1134687	25.35	ug/L	0.00
Spiked Amount	25.000		Recovery	=	101.40%	
60) 4-Bromofluorobenzene	17.62	95	508378	24.62	ug/L	0.00
Spiked Amount	25.000		Recovery	=	98.48%	

## Target Compounds

				Qvalue
2) Ethanol	5.90	45	12783	254.95 ug/L 100
3) tert-Butanol (TBA)	7.42	59	75663	117.08 ug/L 100
5) Dichlorodifluoromethane	4.47	85	641544	25.04 ug/L 100
6) Chloromethane	4.78	50	312927	21.53 ug/L 100
7) Vinyl chloride	5.06	62	377531	24.28 ug/L 100
8) Bromomethane	5.66	94	293535	23.27 ug/L 100
9) Chloroethane	5.87	64	329027	24.83 ug/L 100
10) Trichlorofluoromethane	6.68	101	808959	25.35 ug/L 100
11) Acetone	6.83	43	75063	21.66 ug/L 100
12) Iodomethane	7.46	142	407581	26.41 ug/L 94
13) 1,1-Dichloroethene	7.41	96	390447	23.82 ug/L 100
14) Methylene chloride	7.60	84	452050	23.42 ug/L 100
15) Freon 113	7.66	101	515908	25.13 ug/L 100
16) Carbon disulfide	7.92	76	1011118	22.19 ug/L 100
17) trans-1,2-Dichloroethene	8.48	96	437012	23.53 ug/L 100
18) MTBE	8.62	73	831849	24.94 ug/L 100
19) 1,1-Dichloroethane	8.81	63	834894	24.12 ug/L 100
20) Vinyl acetate	8.95	43	415505	25.95 ug/L 100
21) n-Hexane	9.33	86	84809	24.82 ug/L 100
22) 2-Butanone (MEK)	9.34	72	21512	23.31 ug/L # 100
23) Diisopropylether (DIPE)	9.36	45	1566191	24.78 ug/L 100
24) cis-1,2-dichloroethene	9.54	96	479600	24.09 ug/L 100
25) Bromochloromethane	9.76	128	170713	24.80 ug/L 100
26) Chloroform	9.81	83	878352	23.68 ug/L 100
27) 2,2-Dichloropropane	9.92	77	693793	23.26 ug/L 100
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	1208030	25.18 ug/L 100
30) 1,2-Dichloroethane	10.66	62	568789	24.53 ug/L 100
31) 1,1,1-Trichloroethane	10.79	97	788548	24.29 ug/L 100
32) (TAME) tert-Amyl methyl eth	11.50	73	842890	25.15 ug/L 100
34) 1,1-Dichloropropene	11.03	75	608213	24.12 ug/L 100
35) Carbon tetrachloride	11.27	117	656950	24.61 ug/L 100
36) Benzene	11.32	78	1508513	23.73 ug/L 100
37) Dibromomethane	12.05	93	233206	24.93 ug/L 100
38) 1,2-Dichloropropane	12.09	63	391394	24.43 ug/L 100
39) Trichloroethene	12.14	95	480291	24.36 ug/L 100
40) Bromodichloromethane	12.20	83	613515	24.63 ug/L 100

(#) = qualifier out of range (m) = manual integration

03141114.D 031411.M Tue Mar 15 14:32:21 2011

M / 11/11/11  
AC 5/15/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141114.D Vial: 11  
 Acq On : 14 Mar 2011 1:53 pm Operator: NL  
 Sample : 25 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:31 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

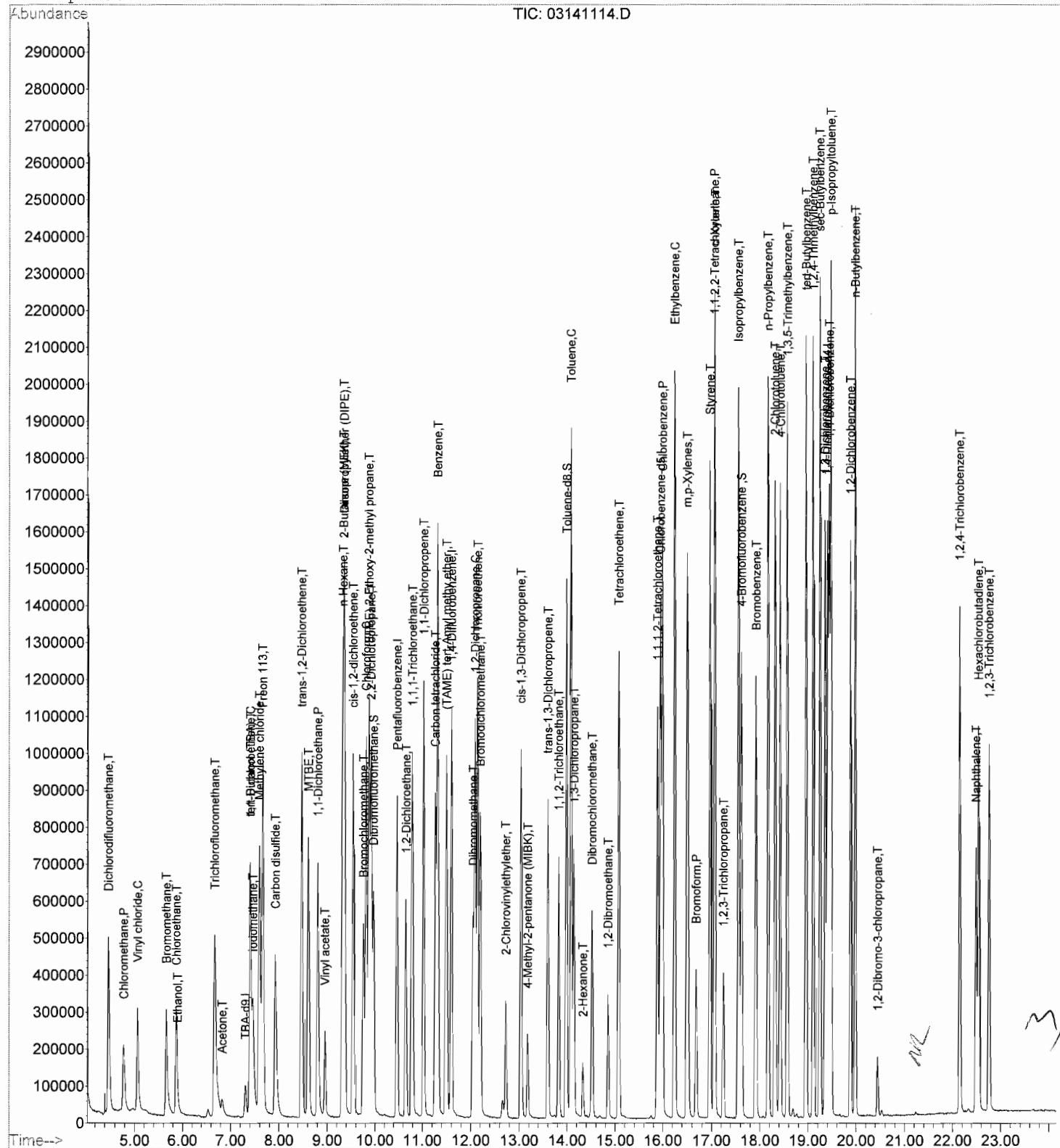
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	137088	26.14	ug/L	100
42) cis-1,3-Dichloropropene	13.04	75	607840	24.94	ug/L	100
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	203600	25.73	ug/L	100
44) trans-1,3-Dichloropropene	13.60	75	511251	25.50	ug/L	100
45) 1,1,2-Trichloroethane	13.82	97	262319	24.69	ug/L	100
47) Toluene	14.08	92	933074	24.15	ug/L	100
49) 1,3-Dichloropropane	14.14	76	441640	24.13	ug/L	100
50) 2-Hexanone	14.33	43	131540	22.89	ug/L	100
51) Dibromochloromethane	14.52	129	360432	24.88	ug/L	100
52) 1,2-Dibromoethane	14.85	107	270589	24.51	ug/L	100
53) Tetrachloroethene	15.08	164	379594	23.25	ug/L	100
54) 1,1,1,2-Tetrachloroethane	15.88	131	376298	22.50	ug/L	100
55) Chlorobenzene	15.99	112	1006476	23.41	ug/L	100
56) Ethylbenzene	16.24	91	1857231	24.15	ug/L	100
57) m,p-Xylenes	16.51	106	628744	23.20	ug/L	100
58) Styrene	16.96	104	1001976	24.34	ug/L	100
59) o-Xylene	17.06	106	605795	25.36	ug/L	100
62) Bromoform	16.68	173	233549	26.59	ug/L	100
63) 1,1,2,2-Tetrachloroethane	17.05	83	245970	25.85	ug/L	100
64) 1,2,3-Trichloropropene	17.25	110	70464	25.51	ug/L	100
65) Isopropylbenzene	17.56	105	1606150	25.39	ug/L	100
66) Bromobenzene	17.92	156	438696	25.08	ug/L	100
67) n-Propylbenzene	18.17	91	2037149	24.85	ug/L	100
68) 2-Chlorotoluene	18.31	91	1271086	24.57	ug/L	100
69) 4-Chlorotoluene	18.42	91	1278799	24.32	ug/L	100
70) 1,3,5-Trimethylbenzene	18.57	105	1397804	24.64	ug/L	100
71) tert-Butylbenzene	18.96	119	1141649	24.74	ug/L	100
72) 1,2,4-Trimethylbenzene	19.11	105	1421815	25.01	ug/L	100
73) sec-Butylbenzene	19.25	105	1824073	25.09	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	756893	24.15	ug/L	100
75) 1,4-Dichlorobenzene	19.44	146	756886	24.14	ug/L	100
76) p-Isopropyltoluene	19.48	119	1459478	24.88	ug/L	100
77) 1,2-Dichlorobenzene	19.88	146	683579	24.93	ug/L	100
78) n-Butylbenzene	19.98	91	1484636	25.20	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.45	75	41975	24.35	ug/L	100
80) 1,2,4-Trichlorobenzene	22.15	180	566108	25.44	ug/L	100
81) Naphthalene	22.50	128	700850	27.03	ug/L	100
82) Hexachlorobutadiene	22.55	225	304001	25.89	ug/L	100
83) 1,2,3-Trichlorobenzene	22.77	180	451962	25.34	ug/L	100

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141114.D Vial: 11  
 Acq On : 14 Mar 2011 1:53 pm Operator: NL  
 Sample : 25 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:31 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141115.D Vial: 12  
 Acq On : 14 Mar 2011 2:25 pm Operator: NL  
 Sample : 50 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	129547	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	670991	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	997408	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	901010	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	492423	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	393722	25.59	ug/L	0.00
Spiked Amount	25.000		Recovery	=	102.36%	/
46) Toluene-d8	13.99	98	1093905	24.87	ug/L	0.00
Spiked Amount	25.000		Recovery	=	99.48%	/
60) 4-Bromofluorobenzene	17.62	95	493360	24.82	ug/L	0.00
Spiked Amount	25.000		Recovery	=	99.28%	/

## Target Compounds

				Qvalue
2) Ethanol	5.90	45	28140	544.97 ug/L 94
3) tert-Butanol (TBA)	7.41	59	168991	259.75 ug/L 98
5) Dichlorodifluoromethane	4.48	85	1268670	51.61 ug/L 100
6) Chloromethane	4.77	50	648190	46.48 ug/L 99
7) Vinyl chloride	5.06	62	751169	50.37 ug/L 98
8) Bromomethane	5.66	94	677359	52.19 ug/L 95
9) Chloroethane	5.87	64	623605	49.05 ug/L 99
10) Trichlorofluoromethane	6.68	101	1567791	51.21 ug/L 97
11) Acetone	6.83	43	161282	48.51 ug/L 98
12) Iodomethane	7.46	142	867752	56.43 ug/L 92
13) 1,1-Dichloroethene	7.40	96	776665	49.40 ug/L 99
14) Methylene chloride	7.60	84	878225	47.42 ug/L 100
15) Freon 113	7.66	101	1003135	50.93 ug/L 99
16) Carbon disulfide	7.93	76	1986824	45.45 ug/L 100
17) trans-1,2-Dichloroethene	8.48	96	870839	48.88 ug/L 99
18) MTBE	8.62	73	1655128	51.73 ug/L 99
19) 1,1-Dichloroethane	8.80	63	1598093	48.13 ug/L 100
20) Vinyl acetate	8.96	43	807302	52.56 ug/L 100
21) n-Hexane	9.33	86	160622	49.00 ug/L 95
22) 2-Butanone (MEK)	9.34	72	42923	48.48 ug/L # 88
23) Diisopropylether (DIPE)	9.36	45	3035894	50.08 ug/L 100
24) cis-1,2-dichloroethene	9.55	96	919113	48.12 ug/L 99
25) Bromochloromethane	9.76	128	330831	50.10 ug/L 99
26) Chloroform	9.82	83	1706643	47.96 ug/L 97
27) 2,2-Dichloropropane	9.92	77	1333015	46.60 ug/L 100
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	2371842	51.53 ug/L 98
30) 1,2-Dichloroethane	10.66	62	1113207	50.05 ug/L 100
31) 1,1,1-Trichloroethane	10.80	97	1562600	50.18 ug/L 99
32) (TAME) tert-Amyl methyl eth	11.50	73	1664448	51.78 ug/L 99
34) 1,1-Dichloropropene	11.03	75	1190399	48.03 ug/L 99
35) Carbon tetrachloride	11.27	117	1325694	50.54 ug/L 99
36) Benzene	11.32	78	3016498	48.28 ug/L 100
37) Dibromomethane	12.04	93	455004	49.50 ug/L 99
38) 1,2-Dichloropropane	12.09	63	756947	48.08 ug/L 98
39) Trichloroethene	12.15	95	914194	47.18 ug/L 99
40) Bromodichloromethane	12.20	83	1230941	50.29 ug/L 99

(#) = qualifier out of range (m) = manual integration

03141115.D 031411.M Tue Mar 15 14:32:50 2011

3/13/11  
9/13/11

Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141115.D Vial: 12  
 Acq On : 14 Mar 2011 2:25 pm Operator: NL  
 Sample : 50 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

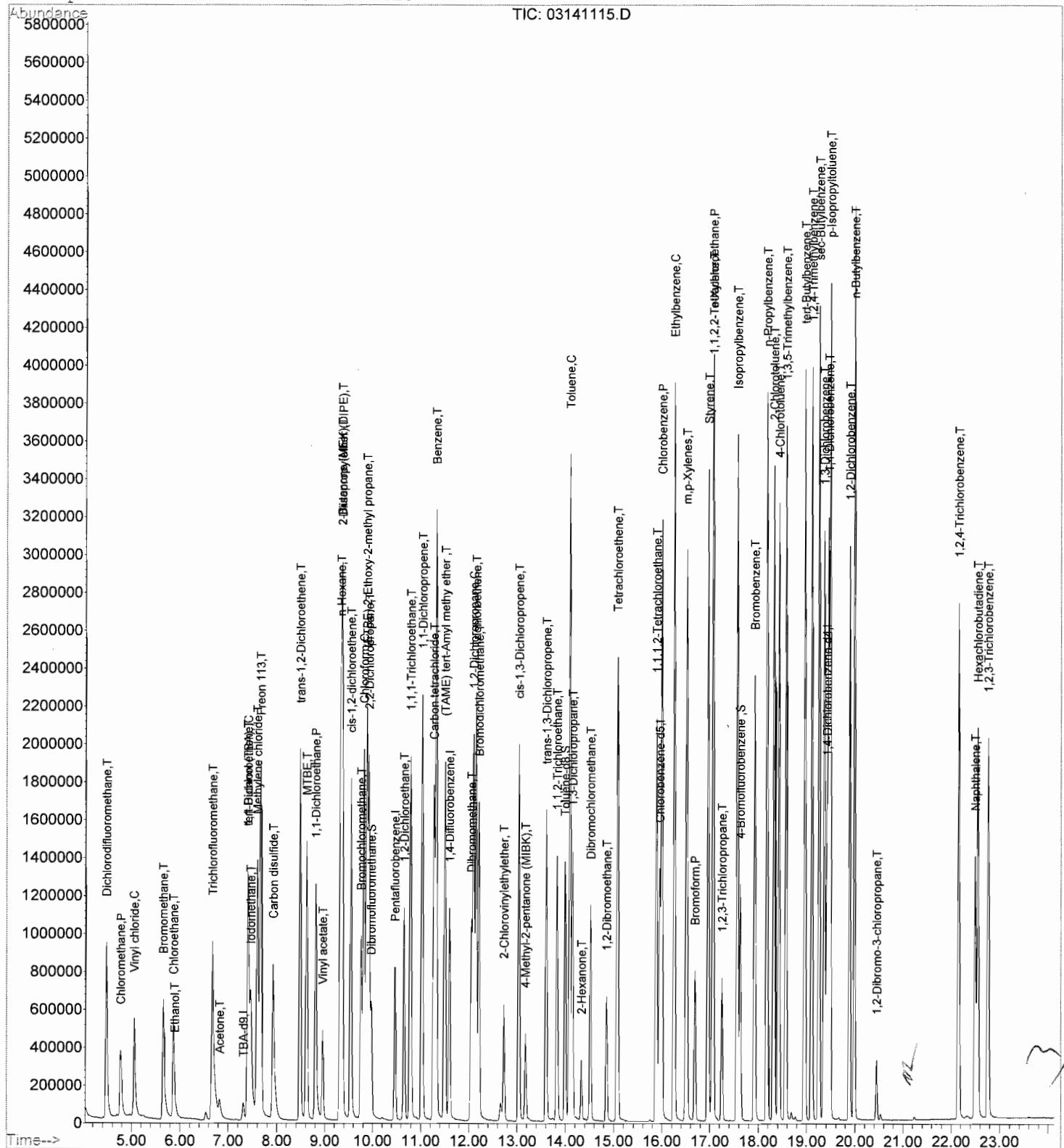
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	266778	51.77	ug/L	99
42) cis-1,3-Dichloropropene	13.04	75	1185095	49.48	ug/L	99
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	398644	51.28	ug/L	98
44) trans-1,3-Dichloropropene	13.61	75	1001184	50.82	ug/L	99
45) 1,1,2-Trichloroethane	13.82	97	514332	49.26	ug/L	99
47) Toluene	14.09	92	1779817	46.88	ug/L	99
49) 1,3-Dichloropropane	14.15	76	852950	48.41	ug/L	97
50) 2-Hexanone	14.33	43	268872	48.60	ug/L	99
51) Dibromochloromethane	14.52	129	714956	51.27	ug/L	100
52) 1,2-Dibromoethane	14.85	107	529074	49.79	ug/L	99
53) Tetrachloroethene	15.08	164	745600	47.43	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	735432	45.69	ug/L	99
55) Chlorobenzene	15.99	112	1983395	47.93	ug/L	99
56) Ethylbenzene	16.25	91	3510837	47.42	ug/L	100
57) m,p-Xylenes	16.51	106	1231716	47.22	ug/L	99
58) Styrene	16.96	104	1956092	49.37	ug/L	99
59) o-Xylene	17.07	106	1115033	49.34	ug/L	99
62) Bromoform	16.69	173	463856	52.82	ug/L	98
63) 1,1,2,2-Tetrachloroethane	17.05	83	450936	47.40	ug/L	100
64) 1,2,3-Trichloropropane	17.25	110	136352	49.38	ug/L	99
65) Isopropylbenzene	17.56	105	3017352	47.71	ug/L	100
66) Bromobenzene	17.93	156	844066	48.26	ug/L	100
67) n-Propylbenzene	18.17	91	3910942	47.73	ug/L	99
68) 2-Chlorotoluene	18.31	91	2485264	48.05	ug/L	99
69) 4-Chlorotoluene	18.42	91	2464108	46.88	ug/L	99
70) 1,3,5-Trimethylbenzene	18.58	105	2698442	47.58	ug/L	100
71) tert-Butylbenzene	18.96	119	2181767	47.29	ug/L	100
72) 1,2,4-Trimethylbenzene	19.11	105	2665132	46.89	ug/L	100
73) sec-Butylbenzene	19.25	105	3448685	47.45	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	1457934	46.52	ug/L	100
75) 1,4-Dichlorobenzene	19.44	146	1453388	46.37	ug/L	99
76) p-Isopropyltoluene	19.48	119	2797988	47.71	ug/L	100
77) 1,2-Dichlorobenzene	19.88	146	1316655	48.03	ug/L	100
78) n-Butylbenzene	19.98	91	2914423	49.48	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.45	75	85744	49.76	ug/L	98
80) 1,2,4-Trichlorobenzene	22.15	180	1130857	50.84	ug/L	99
81) Naphthalene	22.50	128	1372583	52.96	ug/L	99
82) Hexachlorobutadiene	22.55	225	587184	50.03	ug/L	99
83) 1,2,3-Trichlorobenzene	22.77	180	898332	50.38	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141115.D Vial: 12  
Acq On : 14 Mar 2011 2:25 pm Operator: NL  
Sample : 50 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141116.D Vial: 13  
 Acq On : 14 Mar 2011 2:57 pm Operator: NL  
 Sample : 100 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	113794	200.00	ug/L	0.00
4) Pentafluorobenzene	10.48	168	693519	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	1026382	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	955378	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	487259	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	404725	25.45	ug/L	0.00
Spiked Amount	25.000			Recovery	= 101.80%	
46) Toluene-d8	13.99	98	1139190	25.17	ug/L	0.00
Spiked Amount	25.000			Recovery	= 100.68%	
60) 4-Bromofluorobenzene	17.63	95	485891	23.06	ug/L	0.00
Spiked Amount	25.000			Recovery	= 92.24%	

## Target Compounds

					Qvalue
2) Ethanol	5.91	45	46631	1028.08	ug/L 99
3) tert-Butanol (TBA)	7.42	59	300094	530.21	ug/L 100
5) Dichlorodifluoromethane	4.48	85	2554129	100.53	ug/L 100
6) Chloromethane	4.77	50	1645801	114.18	ug/L 99
7) Vinyl chloride	5.05	62	1581189	102.58	ug/L 98
8) Bromomethane	5.66	94	1531021	104.12	ug/L 92
9) Chloroethane	5.87	64	1202091	91.48	ug/L 99
10) Trichlorofluoromethane	6.68	101	3224844	101.92	ug/L 99
11) Acetone	6.83	43	314036	91.39	ug/L 100
12) Iodomethane	7.47	142	1661350	103.01	ug/L 94
13) 1,1-Dichloroethene	7.42	96	1609439	99.04	ug/L 99
14) Methylene chloride	7.60	84	1776246	92.80	ug/L 99
15) Freon 113	7.67	101	2074880	101.93	ug/L 99
16) Carbon disulfide	7.93	76	4260339	94.30	ug/L 99
17) trans-1,2-Dichloroethene	8.49	96	1781041	96.72	ug/L 98
18) MTBE	8.62	73	3369949	101.91	ug/L 100
19) 1,1-Dichloroethane	8.81	63	3337302	97.25	ug/L 100
20) Vinyl acetate	8.96	43	1672603	105.37	ug/L 100
21) n-Hexane	9.33	86	320247	94.53	ug/L 94
22) 2-Butanone (MEK)	9.35	72	84260	92.08	ug/L # 85
23) Diisopropylether (DIPE)	9.37	45	5832515	93.08	ug/L 99
24) cis-1,2-dichloroethene	9.55	96	1915971	97.05	ug/L 99
25) Bromochloromethane	9.76	128	695057	101.84	ug/L # 77
26) Chloroform	9.82	83	3490527	94.91	ug/L 97
27) 2,2-Dichloropropane	9.92	77	2752255	93.08	ug/L 97
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	4704788	98.89	ug/L 98
30) 1,2-Dichloroethane	10.66	62	2288489	99.54	ug/L 100
31) 1,1,1-Trichloroethane	10.79	97	3196019	99.30	ug/L 100
32) (TAME) tert-Amyl methyl eth	11.50	73	3339084	100.50	ug/L 99
34) 1,1-Dichloropropene	11.03	75	2483128	97.36	ug/L 100
35) Carbon tetrachloride	11.27	117	2708678	100.35	ug/L 100
36) Benzene	11.32	78	6052292	94.14	ug/L 99
37) Dibromomethane	12.05	93	912847	96.51	ug/L 99
38) 1,2-Dichloropropane	12.09	63	1518990	93.76	ug/L 98
39) Trichloroethene	12.15	95	1886393	94.60	ug/L 99
40) Bromodichloromethane	12.21	83	2439967	96.87	ug/L 100

(#) = qualifier out of range (m) = manual integration

03141116.D 031411.M Tue Mar 15 14:33:06 2011

M/110  
3/15/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141116.D Vial: 13  
 Acq On : 14 Mar 2011 2:57 pm Operator: NL  
 Sample : 100 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

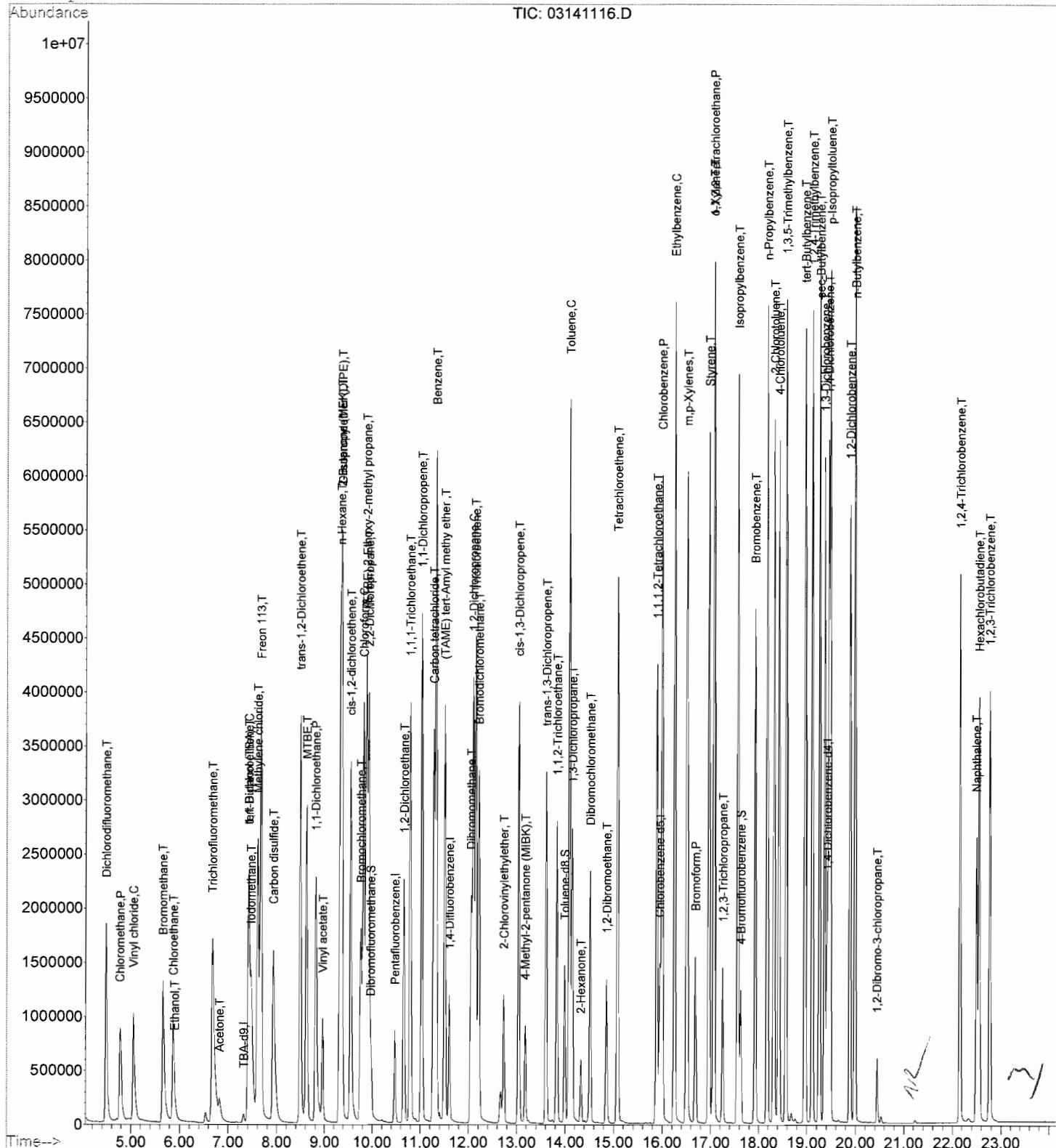
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	540136	101.86	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	2422907	98.31	ug/L	99
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	790515	98.81	ug/L	99
44) trans-1,3-Dichloropropene	13.61	75	2038801	100.56	ug/L	99
45) 1,1,2-Trichloroethane	13.83	97	1058683	98.54	ug/L	97
47) Toluene	14.09	92	3515212	89.97	ug/L	98
49) 1,3-Dichloropropane	14.15	76	1708221	91.44	ug/L	98
50) 2-Hexanone	14.33	43	518728	88.43	ug/L	99
51) Dibromochloromethane	14.52	129	1459234	98.69	ug/L	99
52) 1,2-Dibromoethane	14.86	107	1082579	96.07	ug/L	99
53) Tetrachloroethene	15.08	164	1519487	91.16	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.89	131	1512845	88.64	ug/L	99
55) Chlorobenzene	16.00	112	3917483	89.29	ug/L	99
56) Ethylbenzene	16.25	91	6837089	87.09	ug/L	99
57) m,p-Xylenes	16.51	106	2462109	89.02	ug/L	98
58) Styrene	16.97	104	3789547	90.20	ug/L	100
59) o-Xylene	17.07	106	2256874	96.83	ug/L	97
62) Bromoform	16.69	173	944244	108.66	ug/L	98
63) 1,1,2,2-Tetrachloroethane	17.05	83	873846	92.83	ug/L	100
64) 1,2,3-Trichloropropane	17.26	110	274845	100.60	ug/L	97
65) Isopropylbenzene	17.57	105	5973801	95.45	ug/L	99
66) Bromobenzene	17.92	156	1680625	97.11	ug/L	98
67) n-Propylbenzene	18.17	91	7541537	93.01	ug/L	98
68) 2-Chlorotoluene	18.32	91	4704101	91.91	ug/L	100
69) 4-Chlorotoluene	18.42	91	4886954	93.95	ug/L	99
70) 1,3,5-Trimethylbenzene	18.57	105	5395308	96.13	ug/L	98
71) tert-Butylbenzene	18.97	119	4264845	93.42	ug/L	100
72) 1,2,4-Trimethylbenzene	19.11	105	5218841	92.80	ug/L	99
73) sec-Butylbenzene	19.25	105	6692864	93.05	ug/L	99
74) 1,3-Dichlorobenzene	19.36	146	2835322	91.44	ug/L	99
75) 1,4-Dichlorobenzene	19.44	146	2796075	90.16	ug/L	99
76) p-Isopropyltoluene	19.48	119	5291995	91.19	ug/L	100
77) 1,2-Dichlorobenzene	19.89	146	2559332	94.35	ug/L	99
78) n-Butylbenzene	19.99	91	5507303	94.50	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.44	75	161576	94.76	ug/L	98
80) 1,2,4-Trichlorobenzene	22.16	180	2217200	100.74	ug/L	99
81) Naphthalene	22.50	128	2569603	100.19	ug/L	99
82) Hexachlorobutadiene	22.55	225	1189477	102.42	ug/L	100
83) 1,2,3-Trichlorobenzene	22.77	180	1773297	100.51	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141116.D Vial: 13  
Acq On : 14 Mar 2011 2:57 pm Operator: NL  
Sample : 100 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:32 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141117.D Vial: 14  
 Acq On : 14 Mar 2011 3:29 pm Operator: NL  
 Sample : 200 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:33 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.32	65	129365	200.00	ug/L	0.01
4) Pentafluorobenzene	10.47	168	699660	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	1006186	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	917970	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	479748	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
29) Dibromofluoromethane	9.98	113	398274	24.83	ug/L	0.00
Spiked Amount 25.000			Recovery	=	99.32%	
46) Toluene-d8	13.99	98	1157719	26.09	ug/L	0.00
Spiked Amount 25.000			Recovery	=	104.36%	
60) 4-Bromofluorobenzene	17.62	95	485250	23.96	ug/L	0.00
Spiked Amount 25.000			Recovery	=	95.84%	
<b>Target Compounds</b>						
2) Ethanol	5.91	45	94550	1833.65	ug/L	100
3) tert-Butanol (TBA)	7.42	59	623983	973.91	ug/L	100
5) Dichlorodifluoromethane	4.48	85	4978796	194.24	ug/L	99
6) Chloromethane	4.77	50	3627894	249.48	ug/L	99
7) Vinyl chloride	5.04	62	2933915	188.67	ug/L	98
8) Bromomethane	5.66	94	3378676	198.09	ug/L	95
9) Chloroethane	5.87	64	2405721	181.47	ug/L	99
10) Trichlorofluoromethane	6.68	101	6347877	198.85	ug/L	98
11) Acetone	6.83	43	712547	205.54	ug/L	99
12) Iodomethane	7.46	142	3664938	223.13	ug/L	93
13) 1,1-Dichloroethene	7.41	96	3203884	195.43	ug/L	99
14) Methylene chloride	7.60	84	3537544	183.19	ug/L	98
15) Freon 113	7.66	101	4003342	194.94	ug/L	99
16) Carbon disulfide	7.93	76	8527296	187.10	ug/L	99
17) trans-1,2-Dichloroethene	8.49	96	3483064	187.48	ug/L	100
18) MTBE	8.62	73	7020635	210.44	ug/L	100
19) 1,1-Dichloroethane	8.81	63	6426123	185.62	ug/L	99
20) Vinyl acetate	8.96	43	3622976	226.23	ug/L	100
21) n-Hexane	9.33	86	604351	176.83	ug/L	98
22) 2-Butanone (MEK)	9.35	72	170530	184.73	ug/L	# 68
23) Diisopropylether (DIPE)	9.37	45	11136877	176.17	ug/L	99
24) cis-1,2-dichloroethene	9.55	96	3661493	183.83	ug/L	99
25) Bromochloromethane	9.77	128	1405227	204.09	ug/L	# 81
26) Chloroform	9.82	83	6678986	180.01	ug/L	97
27) 2,2-Dichloropropane	9.93	77	5304843	177.83	ug/L	98
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	9368890	195.19	ug/L	97
30) 1,2-Dichloroethane	10.66	62	4567841	196.94	ug/L	99
31) 1,1,1-Trichloroethane	10.80	97	6043640	186.12	ug/L	99
32) (TAME) tert-Amyl methyl eth	11.50	73	6670791	199.02	ug/L	99
34) 1,1-Dichloropropene	11.03	75	4722226	188.87	ug/L	99
35) Carbon tetrachloride	11.28	117	5241069	198.06	ug/L	99
36) Benzene	11.32	78	11220600	178.04	ug/L	98
37) Dibromomethane	12.05	93	1825022	196.82	ug/L	99
38) 1,2-Dichloropropane	12.09	63	2880453	181.36	ug/L	# 89
39) Trichloroethene	12.15	95	3587777	183.54	ug/L	98
40) Bromodichloromethane	12.21	83	4858580	196.76	ug/L	100

(#) = qualifier out of range (m) = manual integration

03141117.D 031411.M Tue Mar 15 14:33:20 2011

Page 1

M/V/11  
MC  
3/15/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141117.D Vial: 14  
 Acq On : 14 Mar 2011 3:29 pm Operator: NL  
 Sample : 200 PPB CAL PT Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Mar 15 14:33 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

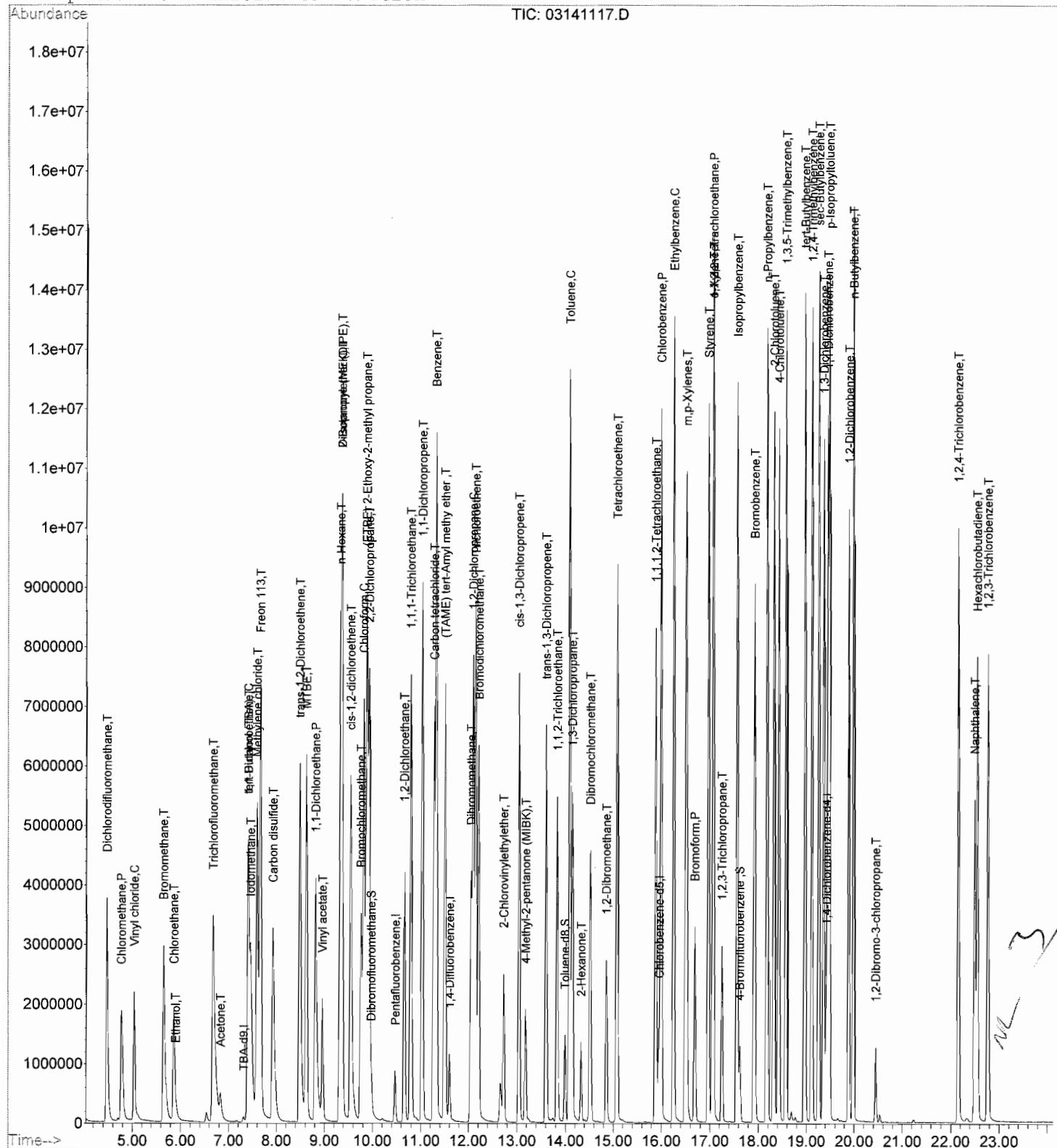
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	1142848	219.84	ug/L	99
42) cis-1,3-Dichloropropene	13.04	75	4684444	193.90	ug/L	99
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	1726401	220.12	ug/L	96
44) trans-1,3-Dichloropropene	13.61	75	4141624	208.38	ug/L	99
45) 1,1,2-Trichloroethane	13.83	97	2150786	204.20	ug/L	97
47) Toluene	14.09	92	6860422	179.11	ug/L	97
49) 1,3-Dichloropropane	14.15	76	3459676	192.73	ug/L	98
50) 2-Hexanone	14.33	43	1133041	201.03	ug/L	99
51) Dibromochloromethane	14.52	129	3004500	211.49	ug/L	100
52) 1,2-Dibromoethane	14.85	107	2245419	207.39	ug/L	98
53) Tetrachloroethene	15.08	164	2909810	181.69	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	3044708	185.67	ug/L	99
55) Chlorobenzene	15.99	112	7715745	183.03	ug/L	98
56) Ethylbenzene	16.25	91	12545598	166.32	ug/L	96
57) m,p-Xylenes	16.52	106	4695826	176.71	ug/L	95
58) Styrene	16.96	104	7335940	181.73	ug/L	100
59) o-Xylene	17.07	106	4257910	201.87	ug/L	94
62) Bromoform	16.69	173	1975315	230.87	ug/L	99
63) 1,1,2,2-Tetrachloroethane	17.06	83	1734795	187.17	ug/L	99
64) 1,2,3-Trichloropropene	17.26	110	571615	212.50	ug/L	97
65) Isopropylbenzene	17.57	105	11035185	179.08	ug/L	97
66) Bromobenzene	17.93	156	3228495	189.47	ug/L	98
67) n-Propylbenzene	18.18	91	13380305	167.60	ug/L	96
68) 2-Chlorotoluene	18.32	91	8705455	172.76	ug/L	98
69) 4-Chlorotoluene	18.42	91	8803914	171.91	ug/L	97
70) 1,3,5-Trimethylbenzene	18.58	105	9721195	175.93	ug/L	96
71) tert-Butylbenzene	18.96	119	7867457	175.03	ug/L	99
72) 1,2,4-Trimethylbenzene	19.12	105	9604835	173.46	ug/L	97
73) sec-Butylbenzene	19.26	105	11904238	168.10	ug/L	97
74) 1,3-Dichlorobenzene	19.36	146	5330110	174.58	ug/L	99
75) 1,4-Dichlorobenzene	19.44	146	5270566	172.61	ug/L	100
76) p-Isopropyltoluene	19.49	119	9529633	166.78	ug/L	99
77) 1,2-Dichlorobenzene	19.89	146	4794946	179.53	ug/L	99
78) n-Butylbenzene	19.98	91	9702846	169.09	ug/L	96
79) 1,2-Dibromo-3-chloropropan	20.45	75	325159	193.69	ug/L	94
80) 1,2,4-Trichlorobenzene	22.15	180	4350123	200.74	ug/L	99
81) Naphthalene	22.50	128	5414389	214.41	ug/L	98
82) Hexachlorobutadiene	22.55	225	2333987	204.10	ug/L	99
83) 1,2,3-Trichlorobenzene	22.77	180	3553855	204.58	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031411\03141117.D Vial: 14  
Acq On : 14 Mar 2011 3:29 pm Operator: NL  
Sample : 200 PPB CAL PT Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 15 14:33 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

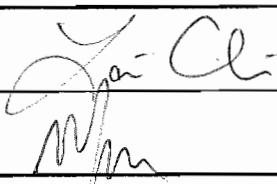
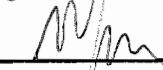
METHOD: 8260B

DATE: 03/17/2011

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: Volatiles	Method: 8260B	Instrument #: 6cm S 7
Analyst: LC	Analysis Date: 03/17/11	
<b>Method name saved in the file:</b>		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, (9), 10, 11, 12		
2. Did the calibration curve pass the method criteria? (Y) N		
3. Were any points of the curve removed or replaced? Y (N)		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? (Y) N		
If yes, what points were removed or replaced: (lowest) middle (highest)		
List of the analytes: Acetone, Methylene chloride, MEK, 2-CEVE, MIBK, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene		
Why? LIRL, Curve Fit		
5. Circle the calibration model used (you may circle one or more)		
<input checked="" type="checkbox"/> Average Response Factor		
<input checked="" type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input checked="" type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: (Y) N		

Review Signatures:	Analyst: 	Date: 03/18/11
	Reviewer: 	Date: 3/18/11

## Attachment 2 ANALYTICAL DATA REVIEW CHECKLIST

SOP PE-VOA-011 R.0

VOCs in Vapor [ Method No. 8260B AZ Method ]

Analysis Date:	<u>03/17/11</u>	Analyst: <u>LC</u>	
Description	Yes	No	NA <sup>1</sup>
1. BFB (50 ng or less): Verify meets criteria every 12 hours	/	/	/
2. Initial Calibration Curve (5 levels)	/	/	/
- Date of Initial Calibration: <u>03/17/11.W</u>	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 30% RPD	/	/	/
- All other compounds ≤ 15% RSD or use curve	/	/	/
- Comments:	/	/	/
- Second source within historical limits	/	/	/
- Tertiary source within 50 – 150% recovery	/	/	(1)
3. Continuing Calibration Check (every 12 hours)	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 20% D	/	/	/
- IS RT ± 30 secs	/	/	/
- IS area –50% to +100%	/	/	/
- All CCVs for reported analytes within historical limits	/	/	/
4. Method Blank	/	/	/
- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/	/	/
- All compounds of interest must be < Reporting Limit	/	/	/
5. Laboratory Control Samples (LCS/LCSD)	/	/	N/A
- Must be analyzed per 20 samples/per matrix/per batch	/	/	/
- LCS/LCSD recoveries within historical limits	/	/	/
- RPD ≤ 25%	/	/	/
- Surrogates within historical limits	/	/	/
6. Samples	/	/	/
- Analyzed within 72 hours of sampling	/	/	/
- IS = RT ± 30 secs and area –50% to +100% of Mid-Point of last ICAL	/	/	/
- Surrogate recoveries within historical limits	/	/	/
- Sample Duplicate performed every 10 samples	/	/	/
Comments:	<u>(1) Bromomethane - N1 - See CAR</u>		

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: <u>J. C.</u>	Date: <u>03/18/11</u>
	Reviewer: <u>M.H.</u>	Date: <u>3/18/11</u>

<sup>1</sup>) NA: Not Applicable

TestAmerica  
Phoenix

Instrument ID	GCMS 7
Date:	03/17/11
Analyst	LC
Method(s)	8260B
50 ppm Cal. Std.	PU01525
2.5 ppm Cal. Std.	PU01528
500 / 250 ppm EtOH/TBA Cal. Std.	n/a
50 / 25 ppm EtOH/TBA Cal. Std.	n/a
50 ppm SS Std.	PU01537
500 / 250 ppm EtOH/TBA SS Std.	n/a

3<sup>rd</sup> Gas: PT06459

This table outlines the initial calibration preparation for GCMS 7, GCMS 4 and GCMS 2.

Calibration Number	FINAL CONCENTRATIONS (ppb)				SPIKE AMOUNTS ( $\mu$ L) in 10 mL final volume			
	ISTD / TBA-d9	VOC	Ethanol	TBA	50ppm Ethanol / 25ppm TBA	2.5ppm VOC Cal. Std.	500ppm Ethanol / 250ppm TBA	50ppm VOC Cal. Std.
1	25/200	0.5	5	2.5	1	2		
2	25/200	1.0	10	5	2	4		
3	25/200	2.0	20	10	4	8		
4	25/200	5.0	50	25			1	1
5	25/200	10	100	50			2	2
6*	25/200	25	250	125			5	5
7	25/200	50	750	375			10	10
8	25/200	100	1000	500			20	20
9	25/200	200	2000	1000			40	40

\*SS/ICVs are at the same level as Calibration point #6 and prepared the same way.

Reviewed By: M. H. Date: 3/18/11

LC 03/18/11

## Response Factor Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\0317111.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

Calibration File  
 0.5 =03171106.D      1.0 =03171107.D      2.0 =03171108.D      5.0 =03171109.D  
 25.0 =03171111.D 50.0 =03171112.D 100. =03171113.D 200. =03171114.D

Compound	0.5	1.0	2.0	5.0	10.0	25.0	50.0	100.	200.	Avg	%RSD
----------	-----	-----	-----	-----	------	------	------	------	------	-----	------

	ISTD										
I	Pentafluorobenzene	1.278	1.131	1.176	1.343	1.199	1.217	1.132	1.112	1.041	1.181 / 7.72
T	Dichlorodifluoromethane	1.965	1.722	1.705	2.115	2.031	1.963	1.991	2.043	2.039	1.953 / 7.34
TMP	Chloromethane	1.791	1.789	1.668	1.817	1.677	1.725	1.728	1.753	1.700	1.739 / 3.03
TMC	Vinyl chloride	0.920	0.793	0.521	0.711	0.801	0.859	0.858	0.916	0.940	0.813 / 6.17
TM	Bromomethane	1.005	1.039	0.879	0.958	0.956	0.913	0.871	0.834	0.839	0.922 / 7.88
TM	Chloroethane	1.302	1.243	1.207	1.370	1.280	1.303	0.986	0.997	1.191	1.209 / 11.13
TM	Trichlorofluoromethane	0.379	0.589	0.400	0.584	0.546	0.597	0.565	0.561	0.556	0.194 / 47.71
T	Acetone	0.860	0.836	0.621	0.721	0.703	0.678	0.638	0.643	0.644	0.531 / 15.44
T	Iodomethane	1.436	1.032	0.802	0.901	0.831	0.804	0.764	0.757	0.744	0.705 / 12.41
TM	1,1-Dichloroethene	1.047	0.958	0.765	0.861	0.786	0.813	0.761	0.768	0.755	0.830 / 11.53
TM	Methylene chloride	2.991	2.718	2.262	2.705	2.441	2.445	2.339	2.359	2.318	0.835 / 12.34
T	Freon 113	0.822	0.931	0.715	0.835	0.766	0.772	0.720	0.735	0.725	2.509 / 9.68
T	Carbon disulfide	1.501	1.617	1.243	1.449	1.271	1.308	1.179	1.227	1.204	0.780 / 9.14
T	trans-1,2-Dichloroethene	1.773	1.868	1.535	1.752	1.632	1.610	1.498	1.506	1.474	1.333 / 11.45
T	MTBE	1.436	1.510	1.090	1.380	1.226	1.231	1.161	1.181	1.162	1.264 / 11.34
T	1,1-Bichloroethane	0.915	0.789	0.816	0.898	0.803	0.800	0.745	0.754	0.751	0.036# / 27.95
T	Vinyl acetate	0.338	0.306	0.271	0.338	0.314	0.289	0.279	0.273	0.253	0.296 / 10.21
T	2-Butanone (MEK)	1.474	1.291	1.359	1.505	1.426	1.329	1.229	1.253	1.222	1.343 / 7.86
T	cis-1,2-Dichloroethene	1.151	1.062	1.049	1.207	1.108	1.096	1.056	1.056	1.014	1.089 / 5.45
T	Bromochloromethane	0.743	0.594	0.581	0.695	0.640	0.629	0.585	0.607	0.588	0.629 / 8.90
S	Chloroform	0.873	0.905	0.802	0.893	0.804	0.830	0.757	0.772	0.740	0.820 / 7.31
TM	2,2-Dichloropropane	0.981	0.938	0.900	1.069	0.997	0.987	0.937	0.942	0.927	0.964 / 5.23
T	Dibromofluoromethane	0.588	0.595	0.568	0.665	0.626	0.630	0.602	0.611	0.602	0.610 / 4.62
T	1,1,1-Trichloroethane	0.111	0.123	0.108	0.100	0.086	0.080	0.080	0.080	0.080	0.101 / 15.92
T	cis-1,3-Dichloropropene	0.588	0.595	0.568	0.665	0.626	0.630	0.602	0.611	0.602	0.610 / 4.62

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4-Methyl-2-pentanone (MIBK)						
TM trans-1,3-Dichloropropene	0.296	0.223	0.257	0.245	0.246	0.237
TM 1,1,2-Trichloroethane	0.429	0.486	0.437	0.505	0.482	0.478
S Toluene-d8	0.230	0.224	0.221	0.244	0.234	0.228
TMC Toluene	1.506	1.274	1.214	1.274	1.213	1.236
	1.070	0.895	0.962	1.017	0.968	0.963
					0.955	0.954
					0.973	4.92
I Chlorobenzene-d5				-ISTD-		
T 1,3-Dichloropropane	0.535	0.569	0.533	0.642	0.578	0.578
T 2-Butanone		0.153	0.215	0.180	0.192	0.192
TM Dibromoethane	0.421	0.294	0.319	0.347	0.331	0.338
T 1,2-Dibromoethane	0.265	0.251	0.278	0.321	0.291	0.290
TM Tetrachloroethene	0.491	0.416	0.421	0.457	0.454	0.451
T 1,1,1,2-Tetrachloroethane	0.419	0.370	0.348	0.372	0.362	0.362
TMP Chlorobenzene	1.278	1.127	1.115	1.215	1.160	1.173
TMC Ethylbenzene	2.432	2.116	2.077	2.272	2.199	2.221
T m,p-Xylenes	0.914	0.710	0.745	0.803	0.758	0.769
T Styrene	1.044	1.064	1.123	1.265	1.177	1.217
T o-Xylene	0.865	0.741	0.720	0.770	0.734	0.734
S 4-Bromofluorobenzene	0.666	0.563	0.532	0.559	0.520	0.531
					0.517	0.509
					0.534	0.509
					0.548	8.71
I,4-Dichlorobenzene-d4				-ISTD-		
TMP Bromoform	0.346	0.342	0.330	0.398	0.372	0.377
TM 1,1,2,2-Tetrachloroethane	0.776	0.777	0.741	0.769	0.759	0.732
T 1,2,3-Trichloropropane	0.119	0.178	0.161	0.182	0.165	0.168
T Isopropylbenzene	4.005	3.607	3.797	3.945	4.018	3.966
T Bromobenzene	0.821	0.849	0.879	0.932	0.930	0.936
T n-Propylbenzene	5.622	5.275	5.271	5.811	5.709	5.635
T 2-Chlorotoluene	3.635	3.131	3.065	3.274	3.275	3.246
T 4-Chlorotoluene	3.455	2.901	3.111	3.329	3.224	3.287
T 1,3,5-Trimethylbenzene	3.482	3.055	3.159	3.421	3.402	3.291
T tert-Butylbenzene	2.867	2.682	2.696	2.874	2.922	2.887
T 1,2,4-Trimethylbenzene	3.429	3.228	3.251	3.411	3.407	3.411
T sec-Butylbenzene	4.909	4.685	4.781	4.988	4.889	4.960
T 1,3-Dichlorobenzene	1.922	1.696	1.781	1.842	1.831	1.832
T 1,4-Dichlorobenzene	2.018	1.817	1.769	1.830	1.781	1.799
T p-Isopropyltoluene	3.621	3.386	3.554	3.772	3.840	3.866
T 1,2-Dichlorobenzene	1.676	1.479	1.524	1.652	1.572	1.593
T n-Butylbenzene	4.083	3.836	3.893	4.307	4.176	4.341
T 1,2-Dibromo-3-chloropropane		0.086	0.108	0.092	0.106	0.101
T 1,2,4-Trichlorobenzene	0.920	1.036	0.925	1.051	0.955	1.090
T Naphthalene		1.322	1.200	1.403	1.267	1.459
T Hexachlorobutadiene	0.624	0.630	0.633	0.635	0.661	0.684
T 1,2,3-Trichlorobenzene	0.835	0.763	0.778	0.889	0.792	0.905
					0.863	0.763
					0.824	6.51

(#) = Out of Range

031711.M

Thu Mar 17 14:51:40 2011

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## Calibration Status Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.5	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D
2	1.0	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D
3	2.0	2	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D
4	5.0	5	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D
5	10.0	10	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D
6	25.0	25	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D
7	50.0	50	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D
8	100.	100	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D
9	200.	200	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	Mar 17 14:03 2011	Mar 17 13:56 2011	17 Mar 2011 9:12 am
2	1.0	Mar 17 14:03 2011	Mar 17 13:57 2011	17 Mar 2011 9:43 am
3	2.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:14 am
4	5.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:45 am
5	10.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:15 am
6	25.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:46 am
7	50.0	Mar 17 14:04 2011	Mar 17 14:01 2011	17 Mar 2011 12:17 pm
8	100.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 12:48 pm
9	200.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 1:19 pm

031711.M

Thu Mar 17 14:51:31 2011

LC 03/18/11  


## Compound List Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 Total Cpdns : 76

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I Pentafluorobenzene	168	10.60	1.000	A	0	A	L
2	T Dichlorodifluoromethane	85	4.60	0.434	A	2	A	B
3	T Chloromethane	50	4.89	0.461	A	1	A	B
4	T Vinyl chloride	62	5.18	0.489	A	1	A	B
5	T Bromomethane	94	5.78	0.545	(L)	1	A	B
6	T Chloroethane	64	5.98	0.564	A	1	A	B
7	T Trichlorofluoromethane	101	6.78	0.639	A	1	A	L
8	T Acetone	43	6.94	0.654	(L)	1	A	L
9	T Iodomethane	142	7.57	0.714	(L)	1	A	B
10	T 1,1-Dichloroethene	96	7.51	0.708	A	2	A	B
11	T Methylene chloride	84	7.71	0.727	A	2	A	B
12	Freon 113	101	7.77	0.733	A	2	A	B
13	T Carbon disulfide	76	8.03	0.757	A	0	A	B
14	T trans-1,2-Dichloroethene	96	8.59	0.810	A	2	A	B
15	T MTBE	73	8.74	0.824	A	1	A	B
16	T 1,1-Dichloroethane	63	8.92	0.841	A	2	A	B
17	T Vinyl acetate	43	9.08	0.857	A	1	A	L
18	T 2-Butanone (MEK)	72	9.47	0.893	(L)	1	A	B
19	T cis-1,2-Dichloroethene	96	9.66	0.911	A	2	A	B
20	T Bromochloromethane	128	9.87	0.931	A	2	A	B
21	T Chloroform	83	9.93	0.936	A	1	A	B
22	T 2,2-Dichloropropane	77	10.04	0.947	A	1	A	B
23	S Dibromofluoromethane	113	10.09	0.951	A	0	A	B
24	T 1,2-Dichloroethane	62	10.78	1.017	A	1	A	B
25	T 1,1,1-Trichloroethane	97	10.91	1.029	A	2	A	B
26	I 1,4-Difluorobenzene	114	11.73	1.000	A	1	A	B
27	T 1,1-Dichloropropene	75	11.15	0.950	A	2	A	B
28	T Carbon tetrachloride	117	11.39	0.971	A	1	A	B
29	T Benzene	78	11.44	0.976	A	1	A	B
30	T Dibromomethane	93	12.17	1.037	A	2	A	B
31	T 1,2-Dichloropropane	63	12.21	1.041	A	1	A	B
32	T Trichloroethene	95	12.27	1.046	A	2	A	B
33	T Bromodichloromethane	83	12.33	1.051	A	2	A	B
34	T 2-Chlorovinylethylether	63	12.86	1.097	(L)	1	A	B
35	T cis-1,3-Dichloropropene	75	13.16	1.122	A	1	A	B
36	T 4-Methyl-2-pentanone (MIBK)	43	13.31	1.135	A	2	A	B
37	T trans-1,3-Dichloropropene	75	13.73	1.171	A	1	A	B
38	T 1,1,2-Trichloroethane	83	13.95	1.189	A	2	A	B
39	S Toluene-d8	98	14.12	1.204	A	0	A	B
40	T Toluene	92	14.21	1.212	A	1	A	B
41	I Chlorobenzene-d5	117	16.07	1.000	A	0	A	B
42	T 1,3-Dichloropropane	76	14.27	0.888	A	1	A	B
43	T 2-Hexanone	43	14.47	0.900	A	2	A	B
44	T Dibromochloromethane	129	14.64	0.911	A	1	A	B
45	T 1,2-Dibromoethane	107	14.98	0.932	A	2	A	B
46	T Tetrachloroethene	166	15.21	0.946	A	2	A	B
47	T 1,1,1,2-Tetrachloroethane	131	16.01	0.996	A	2	A	B
48	T Chlorobenzene	112	16.12	1.003	A	2	A	B
49	T Ethylbenzene	91	16.37	1.019	A	1	A	B
50	T m,p-Xylenes	106	16.64	1.035	A	1	A	B
51	T Styrene	104	17.09	1.064	A	1	A	B
52	T o-Xylene	106	17.19	1.070	A	1	A	B
53	S 4-Bromofluorobenzene	95	17.75	1.105	A	2	A	B
54	1,4-Dichlorobenzene-d4	152	19.53	1.000	A	2	A	B
55	T Bromoform	173	16.81	0.861	A	1	A	B
56	T 1,1,2,2-Tetrachloroethane	83	17.18	0.879	A	2	A	B
57	T 1,2,3-Trichloropropane	110	17.38	0.890	A	1	A	B
58	T Isopropylbenzene	105	17.69	0.906	A	1	A	B
59	T Bromobenzene	156	18.05	0.924	A	2	A	B

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60	T	n-Propylbenzene	91	18.30	0.937	A	1	A	B
61	T	2-Chlorotoluene	91	18.44	0.944	A	1	A	R
62	T	4-Chlorotoluene	91	18.55	0.949	A	1	A	R
63	T	1,3,5-Trimethylbenzene	105	18.70	0.957	A	1	A	B
64	T	tert-Butylbenzene	119	19.09	0.977	A	1	A	B
65	T	1,2,4-Trimethylbenzene	105	19.23	0.984	A	1	A	B
66	T	sec-Butylbenzene	105	19.37	0.992	A	1	A	B
67	T	1,3-Dichlorobenzene	146	19.48	0.997	A	2	A	R
68	T	1,4-Dichlorobenzene	146	19.57	1.002	A	2	A	R
69	T	p-Isopropyltoluene	119	19.61	1.004	A	2	A	B
70	T	1,2-Dichlorobenzene	146	20.02	1.025	A	2	A	B
71	T	n-Butylbenzene	91	20.12	1.030	A	1	A	B
72	T	1,2-Dibromo-3-chloropropane	157	20.58	1.054	A	1	A	B
73	T	1,2,4-Trichlorobenzene	180	22.28	1.141	A	1	A	B
74	T	Naphthalene	128	22.63	1.158	A	0	A	B
75	T	Hexachlorobutadiene	225	22.68	1.161	A	1	A	B
76	T	1,2,3-Trichlorobenzene	180	22.90	1.172	A	1	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

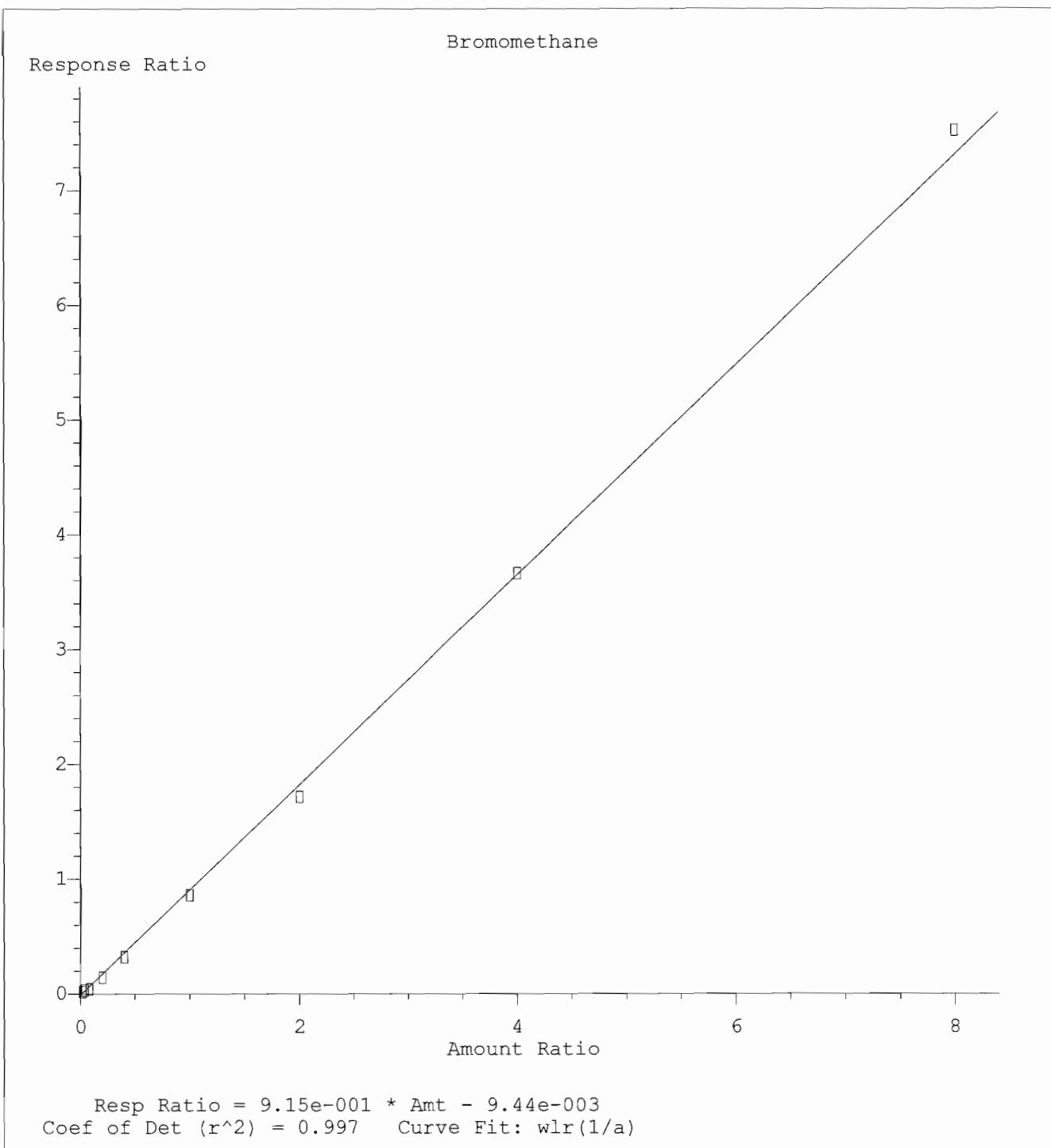
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

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031711.M Thu Mar 17 14:51:24 2011

γ

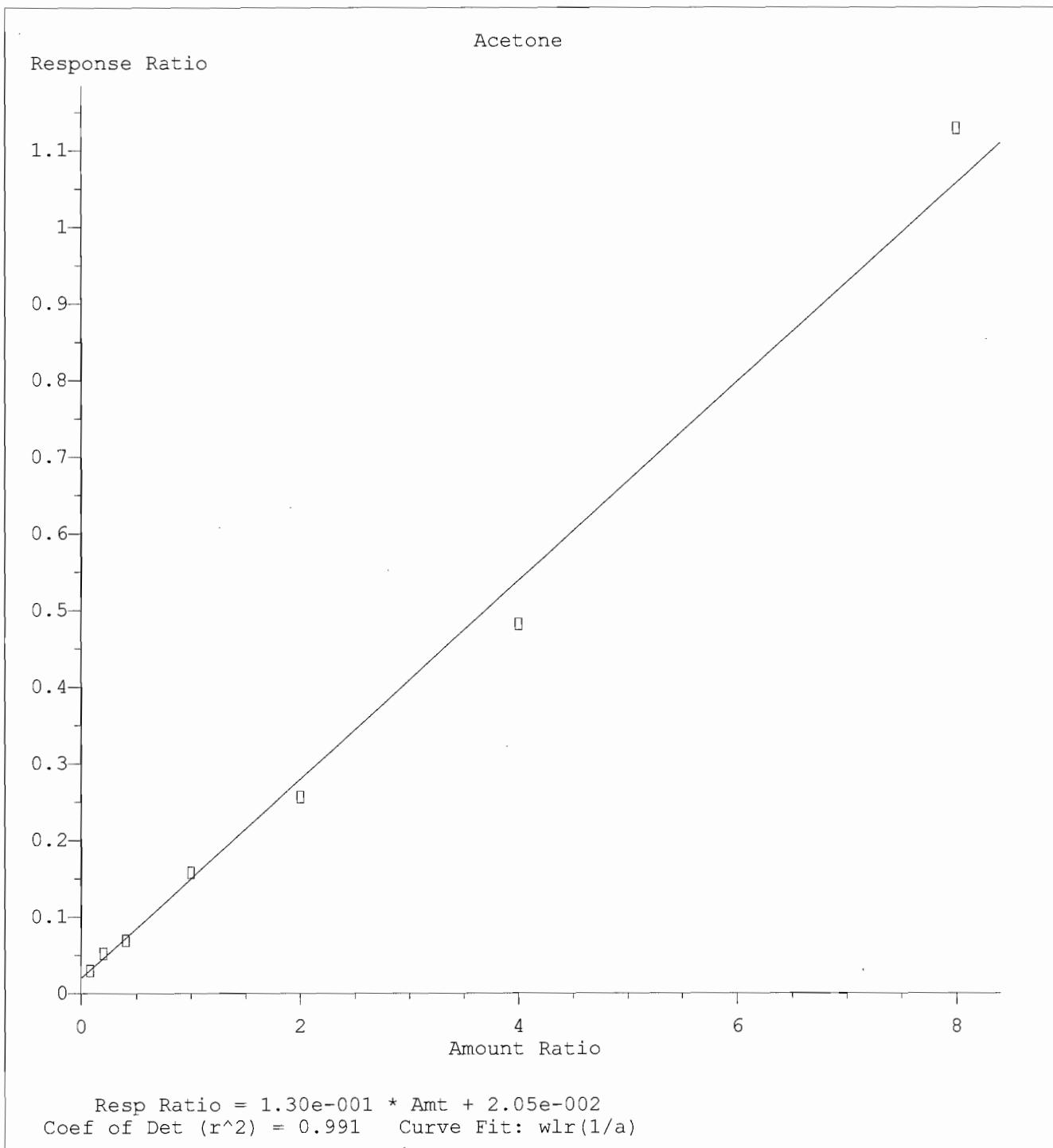
V



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

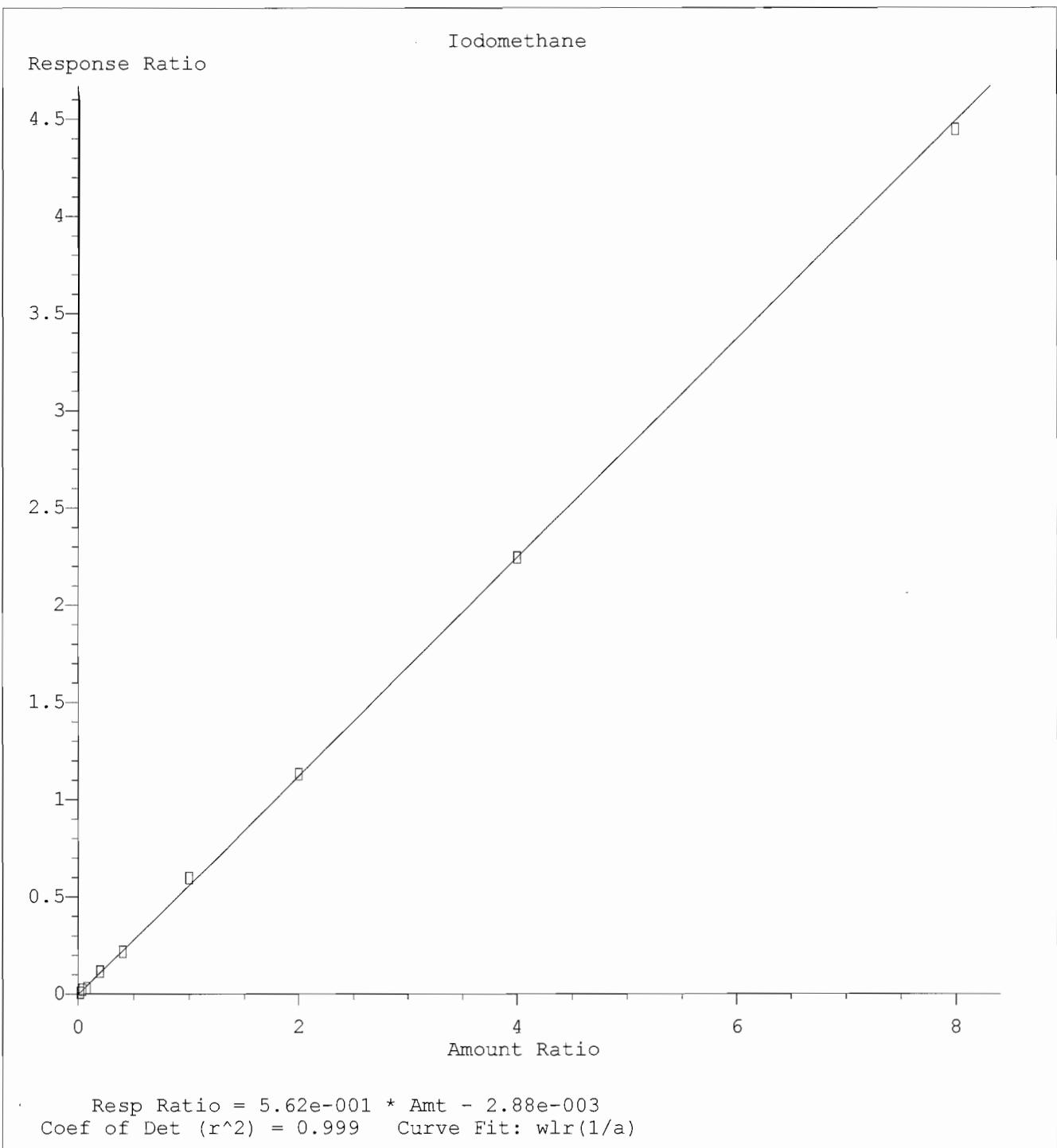
✓ b/w

2013/8/11



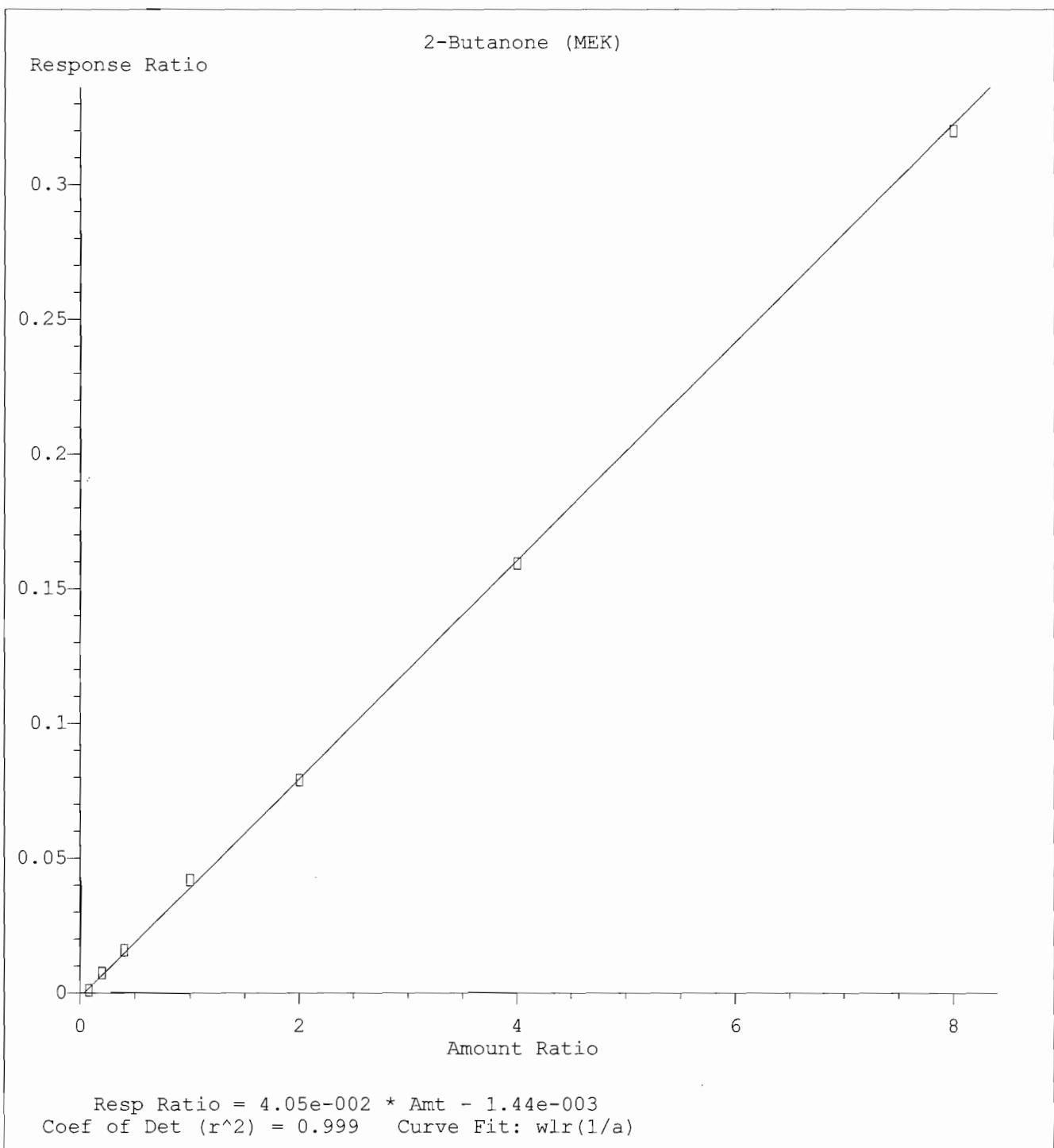
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

~ 11/11  
C 03/8/11



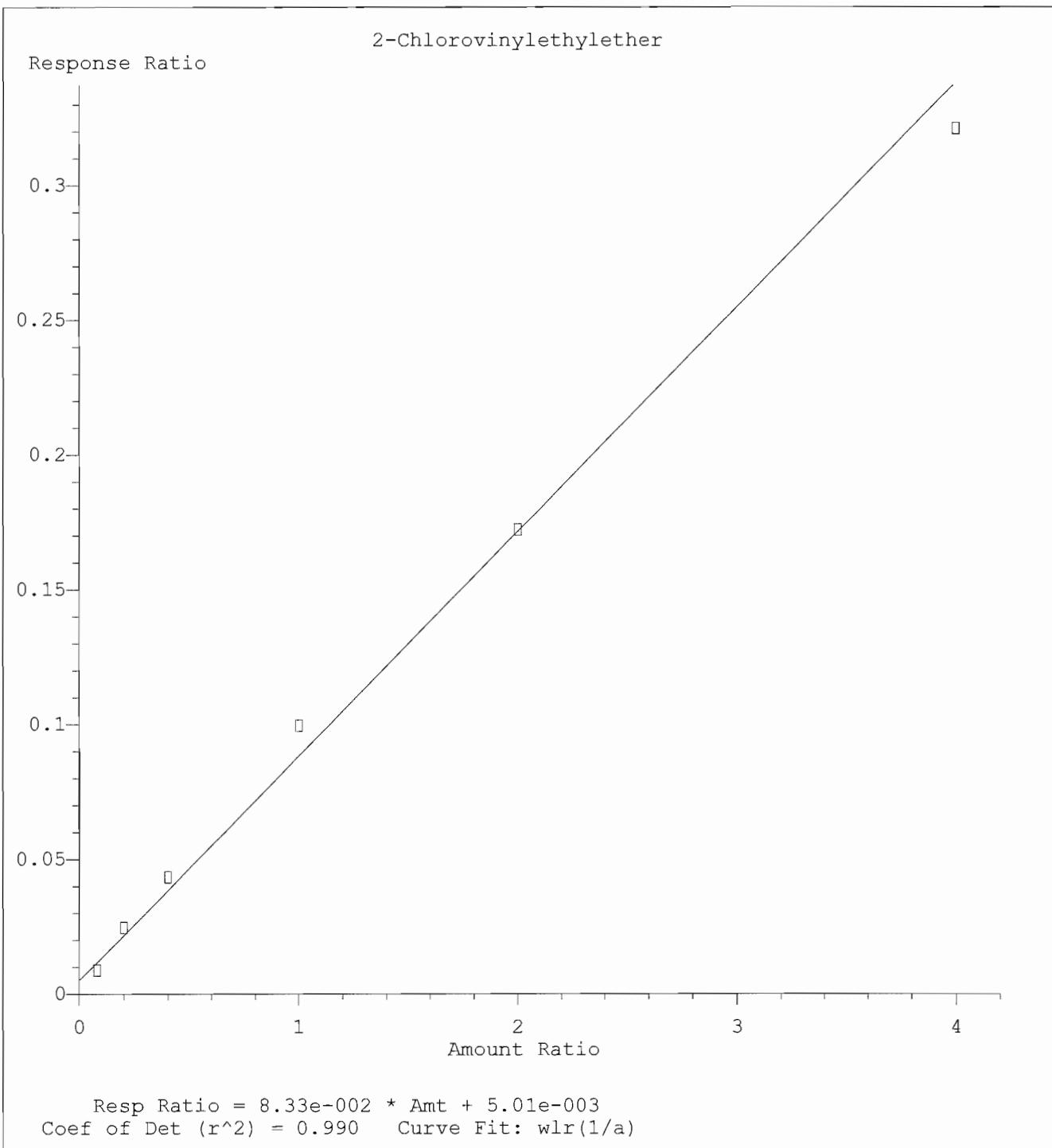
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

ms 4/1/11  
CC 03/18/11



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

m 4/11/11  
03/18/11  
VC



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

Min/MW  
Feb 03/18/11

## Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\031711

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03171101.d	1.	TUNE		17 Mar 2011 06:59
2	1	03171102.d	1.	TUNE		17 Mar 2011 07:16
3	16	03171103.d	1.	25 PPB CCV		17 Mar 2011 07:36
4	1	03171104.d	1.	BLANK		17 Mar 2011 08:10
5	2	03171105.d	1.	BLANK		17 Mar 2011 08:41
6	3	03171106.d	1.	0.5 PPB		17 Mar 2011 09:12
7	4	03171107.d	1.	1.0 PPB		17 Mar 2011 09:43
8	5	03171108.d	1.	2.0 PPB		17 Mar 2011 10:14
9	6	03171109.d	1.	5.0 PPB		17 Mar 2011 10:45
10	7	03171110.d	1.	10 PPB		17 Mar 2011 11:15
11	8	03171111.d	1.	25 PPB		17 Mar 2011 11:46
12	9	03171112.d	1.	50 PPB		17 Mar 2011 12:17
13	10	03171113.d	1.	100 PPB		17 Mar 2011 12:48
14	12	03171114.d	1.	200 PPB		17 Mar 2011 13:19
15	13	03171115.d	1.	SS		17 Mar 2011 13:50
16	16	03171116.d	1.	TERTIARY GAS		17 Mar 2011 14:20
17	1	03171117.d	1.	TUNE		17 Mar 2011 14:47
18	1	03171118.d	1.	25 PPB CCV		17 Mar 2011 15:06
19	2	03171119.d	1.	-BS1		17 Mar 2011 15:37
20	3	03171120.d	1.	-BSD1		17 Mar 2011 16:07
21	4	03171121.d	1.	-BLK1		17 Mar 2011 16:38
22	5	03171122.d	1.	PUC1019-01@16:20		17 Mar 2011 17:09
23	6	03171123.d	1.	PUC1019-02@16:22		17 Mar 2011 17:40
24	7	03171124.d	1.	PUC1025-02@16:25		17 Mar 2011 18:10
25	8	03171125.d	1.	PUC1025-01	5X	17 Mar 2011 18:41
26	9	03171126.d	1.	PUC1025-01	1X	17 Mar 2011 19:12
27	13	03171127.d	1.	PUC1025-01DUP1	1X	17 Mar 2011 19:43
28	16	03171128.d	1.	PUC0795-01		17 Mar 2011 20:13
29	1	03171129.d	1.	PUC0795-02		17 Mar 2011 20:44
30	2	03171130.d	1.	PUC0795-03		17 Mar 2011 21:15
31	3	03171131.d	1.	PUC0795-04		17 Mar 2011 21:46
32	4	03171132.d	1.	PUC0795-05		17 Mar 2011 22:17
33	5	03171133.d	1.	PUC0795-06		17 Mar 2011 22:48
34	6	03171134.d	1.	11C0657-MS1		17 Mar 2011 23:19
35	7	03171135.d	1.	11C0657-MSD1		17 Mar 2011 23:50
36	10	03171136.d	1.	BLK		18 Mar 2011 00:21
37	12	03171137.d	1.	BLK		18 Mar 2011 00:51

M 1/1/11  
VE 03/03/11

TestAmerica  
Phoenix

## GC/MS 7 DAILY LOG SUMMARY

Page 1 of 2

DATE: 03/17/11

QC BATCH # (s): 11C0657, 0659

Air

H<sub>2</sub>O

ANALYST: LC

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\031711

CALIBRATION METHOD(S): 031411.m

/ New Curve -031711.m

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	031711.01	Tune	2uL	N/A	8260B	H <sub>2</sub> O	DNU - Incared Std.
1	02	↓	↓				
16	03	25 PPB CCV	1x10mL				DNU - Acetone
1	04	Blank					DNU - Clean Out
2	05	↓					
3	06	0.5 PPB					
4	07	1.0					
5	08	2.0					
6	09	5.0					
7	10	10					
8	11	25					
9	12	50					
10	13	100					
12	14	200					
13	15	5S					
16	16	Tertiary Gas	1x10cc		Air	Bromomethane 49%	
1	17	Tune	2uL		H <sub>2</sub> O		
1	18	25 PPB CCV	1x10mL				Acet↑
2	19	11C0657 -BS1					iodo, eD↑ 11C0659-BS1
3	20	-BSN1					iodo↑
4	21	-BLK1					BLK1
5	22	PLC109-01A	1x10cc		Air	16:20	
6	23	↓ 02 A					16:22
7	24	1025-02 A					16:25
8	25	1025-01 A @5X	2cc → 10cc				16:30
9	26	-01 A @1X	1x10cc				16:27
13	27	-01 DUP ↓					16:32 11C0657 -PLC1
16	28	PLC0795-01A	1x10mL	≤2	H <sub>2</sub> O	source	
1	29	02 A		≤2			"
2	30	03A		≤2			

## STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PU01537

## REQUIRED REVIEWS

ARCHON REVIEWED

By / Date: LC 03/17/11

SEQUENCE REVIEWED

By / Date: LC 03/17/11

CALIBRATION STD: 1525 / PU01528

Internal Std: 1522

IS/Surrogate/BFB: 1534 / PU01261

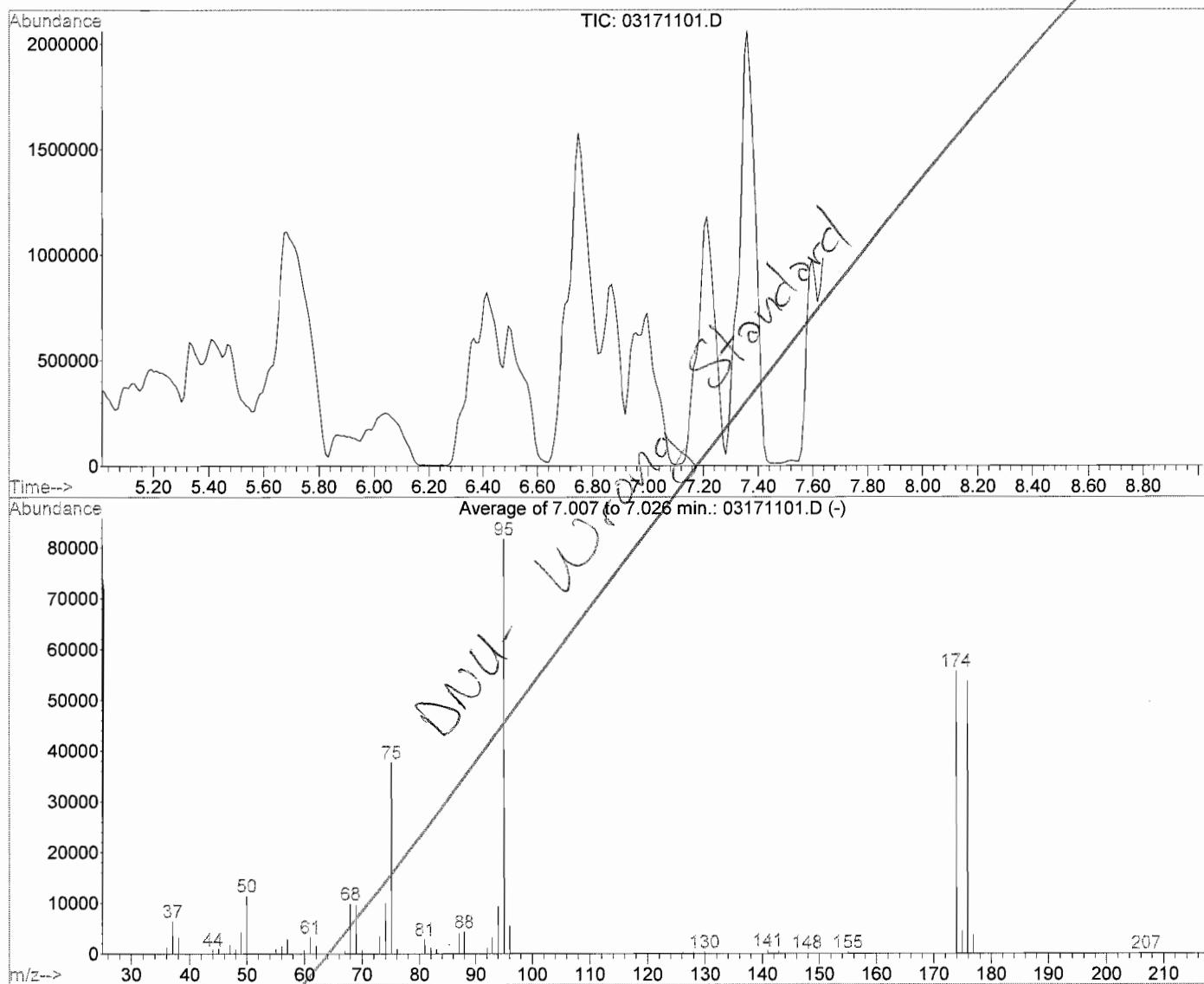
LOT #: 3<sup>o</sup> Gas: PT00459

FINAL REVIEWER / Date:

M 1/1/11

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171101.D Vial: 1  
 Acq On : 17 Mar 2011 6:59 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

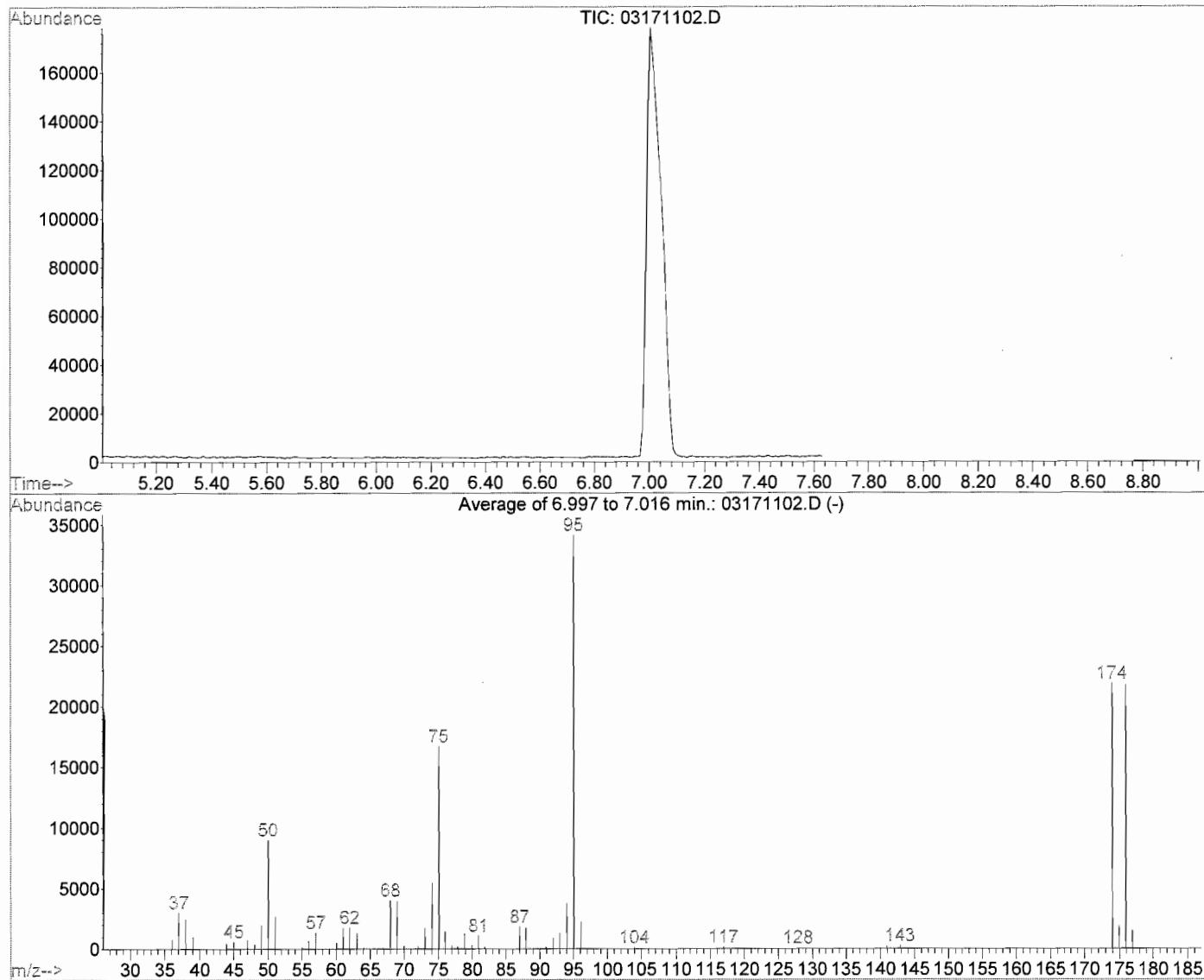


## Spectrum Information: Average of 7.007 to 7.026 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	13.9	11317	FAIL*
75	95	30	60	46.1	37626	PASS
95	95	100	100	100.0	81675	PASS
96	95	5	9	6.6	5429	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.1	55616	PASS
175	174	5	9	7.8	4344	PASS
176	174	95	101	96.5	53661	PASS
177	176	5	9	6.7	3599	PASS

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171102.D Vial: 1  
 Acq On : 17 Mar 2011 7:16 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B



Spectrum Information: Average of 6.997 to 7.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.3	8966	PASS
75	95	30	60	48.9	16685	PASS
95	95	100	100	100.0	34109	PASS
96	95	5	9	6.4	2195	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.1	21869	PASS
175	174	5	9	7.8	1697	PASS
176	174	95	101	99.3	21715	PASS
177	176	5	9	6.7	1463	PASS

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P

Quant Time: Mar 17 13:54 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	183444	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	325784	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	270420	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	118494	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	106054	24.28	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.12%	
39) Toluene-d8	14.11	98	384866	24.78	ug/L	0.00
Spiked Amount 25.000			Recovery	=	99.12%	
53) 4-Bromofluorobenzene	17.75	95	134955	24.39	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.56%	

## Target Compounds

				Qvalue	
2) Dichlorodifluoromethane	4.60	85	203514	22.97	ug/L 100
3) Chloromethane	4.90	50	349427	27.92	ug/L 100
4) Vinyl chloride	5.19	62	318799	26.09	ug/L 99
5) Bromomethane	5.78	94	141014	26.05	ug/L 96
6) Chloroethane	5.99	64	169039	25.83	ug/L 97
7) Trichlorofluoromethane	6.48	101	229398	25.07	ug/L 99
8) Acetone	6.93	43	87501	Below Cal	97
9) Iodomethane	7.58	142	98773	23.31	ug/L 98
10) 1,1-Dichloroethene	7.52	96	122197	26.18	ug/L 94
11) Methylene chloride	7.71	84	141233	23.11	ug/L 100
12) Freon 113	7.78	101	141514	23.82	ug/L 99
13) Carbon disulfide	8.03	76	424756	25.69	ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	133127	23.44	ug/L 97
15) MTBE	8.73	73	229415	23.89	ug/L 98
16) 1,1-Dichloroethane	8.92	63	275296	23.59	ug/L 99
17) Vinyl acetate	9.08	43	220376	24.39	ug/L 99
18) 2-Butanone (MEK)	9.47	72	7147	23.08	ug/L 99
19) cis-1,2-Dichloroethene	9.66	96	138298	23.44	ug/L 98
20) Bromochloromethane	9.87	128	51964	23.76	ug/L 97
21) Chloroform	9.93	83	226993	23.52	ug/L 100
22) 2,2-Dichloropropane	10.03	77	199254	24.74	ug/L 99
24) 1,2-Dichloroethane	10.78	62	137605	24.05	ug/L 98
25) 1,1,1-Trichloroethane	10.91	97	172734	23.93	ug/L 98
27) 1,1-Dichloropropene	11.15	75	199034	23.87	ug/L 99
28) Carbon tetrachloride	11.39	117	140086	24.16	ug/L 99
29) Benzene	11.44	78	525784	23.82	ug/L 100
30) Dibromomethane	12.17	93	59810	22.72	ug/L 99
31) 1,2-Dichloropropane	12.21	63	147015	23.80	ug/L 100
32) Trichloroethene	12.26	95	130559	23.47	ug/L 100
33) Bromodichloromethane	12.33	83	152627	23.43	ug/L 97
34) 2-Chlorovinyl ethylether	12.86	63	34857	23.00	ug/L 98
35) cis-1,3-Dichloropropene	13.17	75	192256	24.47	ug/L 98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	79041	22.82	ug/L 98
37) trans-1,3-Dichloropropene	13.73	75	148191	24.15	ug/L 98
38) 1,1,2-Trichloroethane	13.95	83	69853	23.20	ug/L 96
40) Toluene	14.21	92	301555	24.42	ug/L 99
42) 1,3-Dichloropropane	14.27	76	144303	23.31	ug/L 100

(#= qualifier out of range (m)= manual integration

03171103.D 031411.M Thu Mar 17 13:54:27 2011

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

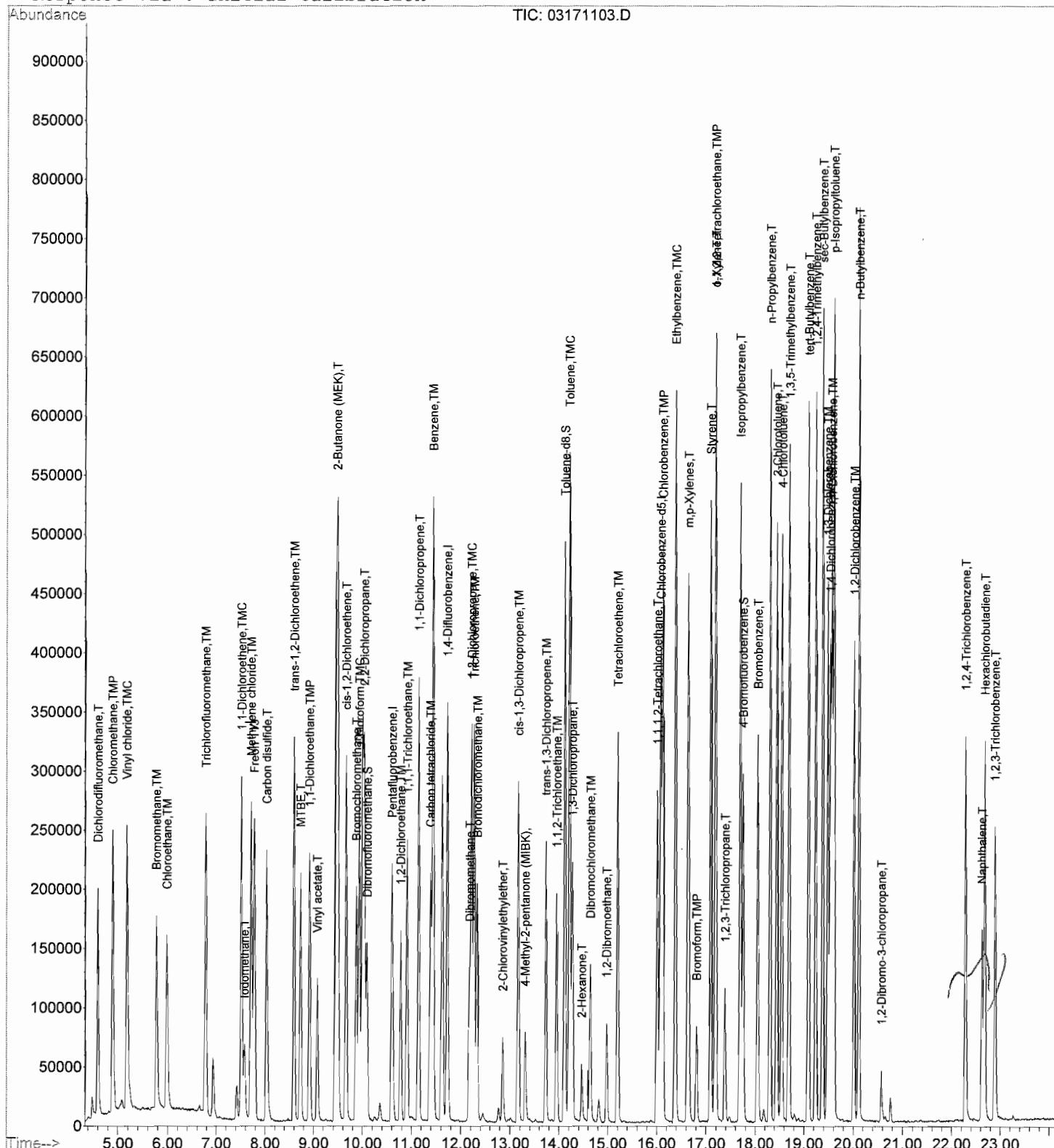
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	52512	24.58	ug/L	# 99
44) Dibromochloromethane	14.65	129	85525	24.04	ug/L	98
45) 1,2-Dibromoethane	14.98	107	75677	25.06	ug/L	99
46) Tetrachloroethene	15.20	166	116159	23.97	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	93416	24.16	ug/L	98
48) Chlorobenzene	16.12	112	306146	24.04	ug/L	97
49) Ethylbenzene	16.38	91	563689	24.00	ug/L	99
50) m,p-Xylenes	16.64	106	197842	23.89	ug/L	100
51) Styrene	17.09	104	313010	24.57	ug/L	100
52) o-Xylene	17.19	106	188426	23.54	ug/L	100
55) Bromoform	16.81	173	45375	27.10	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	85826	24.73	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	19634	26.45	ug/L	97
58) Isopropylbenzene	17.70	105	467417	25.22	ug/L	100
59) Bromobenzene	18.05	156	105243	25.16	ug/L	98
60) n-Propylbenzene	18.30	91	657511	25.12	ug/L	100
61) 2-Chlorotoluene	18.44	91	374515	24.85	ug/L	99
62) 4-Chlorotoluene	18.55	91	377509	25.07	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	397648	25.20	ug/L	99
64) tert-Butylbenzene	19.09	119	338640	25.00	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	398096	24.77	ug/L	98
66) sec-Butylbenzene	19.38	105	570587	24.77	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	211237	24.59	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	208652	24.28	ug/L	99
69) p-Isopropyltoluene	19.61	119	450706	25.20	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	179425	24.69	ug/L	99
71) n-Butylbenzene	20.11	91	503050	25.42	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	11007	24.17	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	125573	24.32	ug/L	99
74) Naphthalene	22.62	128	162763	24.75	ug/L	100
75) Hexachlorobutadiene	22.68	225	79503	27.59	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	100849	23.50	ug/L	98

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
--------------------	------	------	----------	------	-------	-----------

1) Pentafluorobenzene	10.60	168	208596	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	368454	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	303623	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	134043	25.00	ug/L	0.00

System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	111829	22.51	ug/L	0.00
Spiked Amount 25.000			Recovery	=	90.04%	
39) Toluene-d8	14.11	98	400008	22.77	ug/L	0.00
Spiked Amount 25.000			Recovery	=	91.08%	
53) 4-Bromofluorobenzene	17.75	95	138919	22.36	ug/L	0.00
Spiked Amount 25.000			Recovery	=	89.44%	

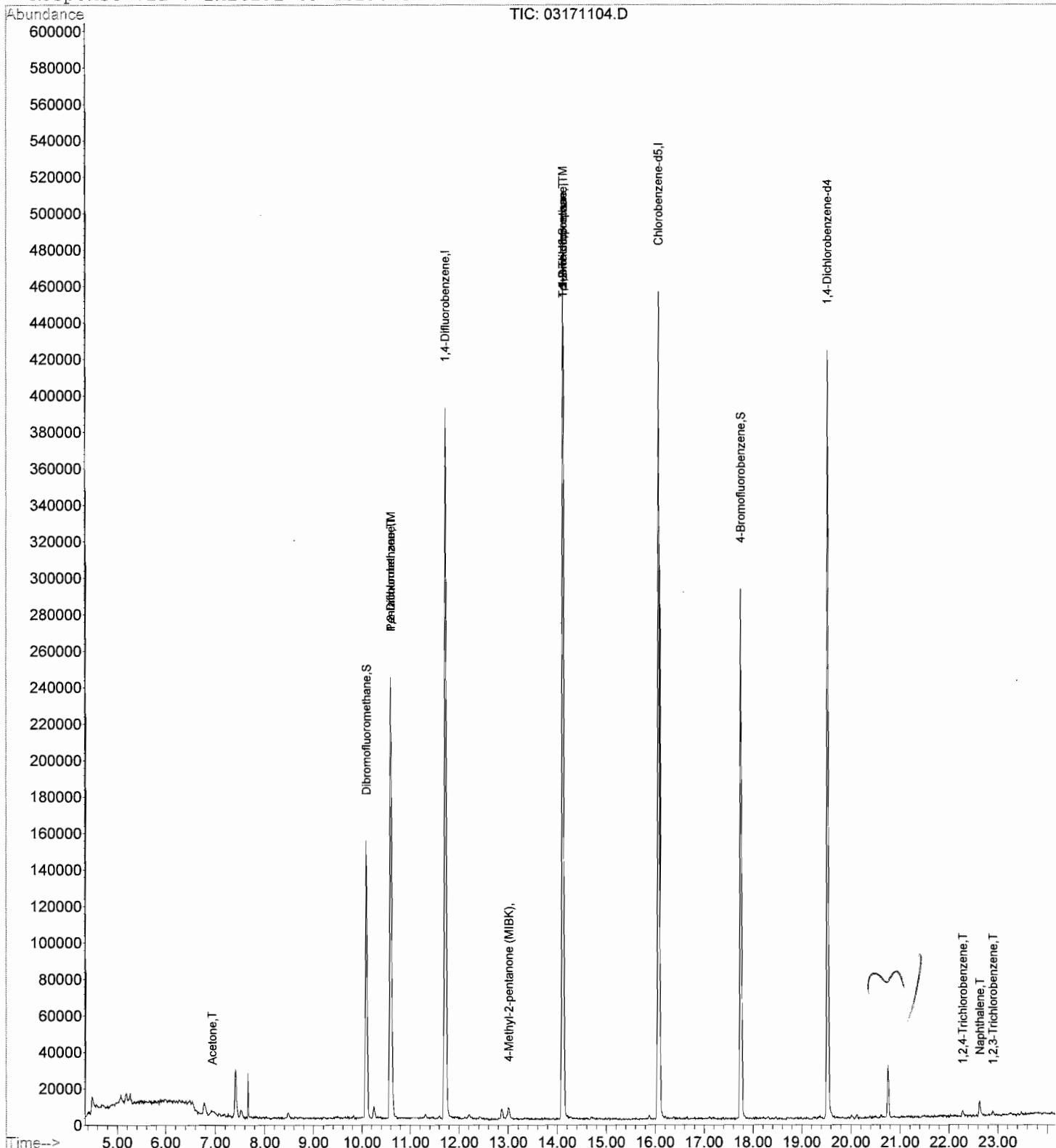
Target Compounds

				Qvalue
8) Acetone	6.94	48	4324	1.42 ug/L # 65
10) 1,1-Dichloroethene	7.51	96	60	Below Cal # 73
13) Carbon disulfide	8.03	76	742	Below Cal 100
24) 1,2-Dichloroethane	10.60	62	1046	0.16 ug/L # 1
36) 4-Methyl-2-pentanone (MIBK)	13.01	43	7775	1.98 ug/L # 50
38) 1,1,2-Trichloroethane	14.12	83	373	0.11 ug/L # 1
42) 1,3-Dichloropropane	14.11	76	4467	0.64 ug/L # 68
73) 1,2,4-Trichlorobenzene	22.29	180	1153	0.20 ug/L 97
74) Naphthalene	22.63	128	8429	1.13 ug/L 100
76) 1,2,3-Trichlorobenzene	22.91	180	1057	0.22 ug/L 93

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	110687	24.00	ug/L	0.00
Spiked Amount	25.000		Recovery	=	96.00%	
39) Toluene-d8	14.11	98	374753	22.97	ug/L	0.00
Spiked Amount	25.000		Recovery	=	91.88%	
53) 4-Bromofluorobenzene	17.75	95	131653	22.85	ug/L	0.00
Spiked Amount	25.000		Recovery	=	91.40%	

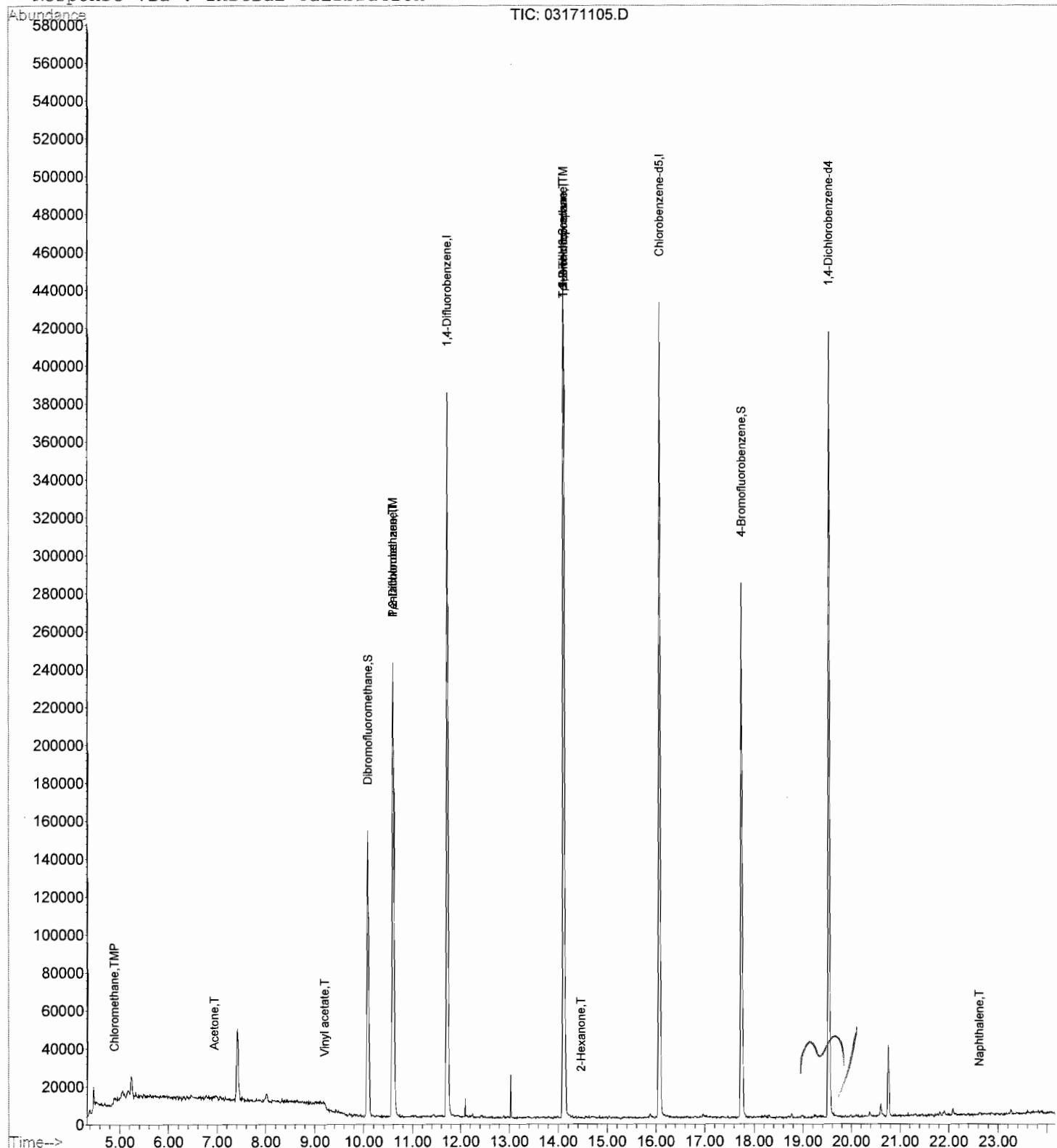
## Target Compounds

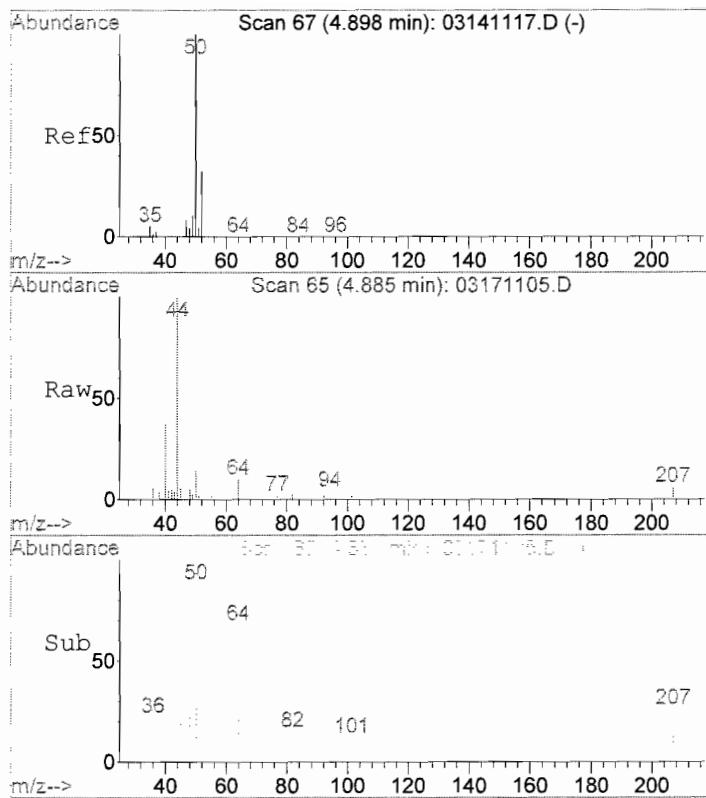
				Qvalue	
3) Chloromethane	4.89	50	1791	0.14 ug/L	LRL 98
8) Acetone	6.93	43	3328	0.96 ug/L	# 69
10) 1,1-Dichloroethene	7.53	96	127	Below Cal	# 1
13) Carbon disulfide	8.02	76	5282	Below Cal	100
17) Vinyl acetate	9.19	43	944	0.10 ug/L	# 82
24) 1,2-Dichloroethane	10.60	62	1206	0.20 ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11 ug/L	# 1
42) 1,3-Dichloropropane	14.12	76	3863	0.60 ug/L	# LRL 70
43) 2-Hexanone	14.46	43	235	0.11 ug/L	# LRL 32
74) Naphthalene	22.63	128	1667	0.23 ug/L	L 100

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
Acq On : 17 Mar 2011 8:41 am Operator: LC  
Sample : BLANK Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

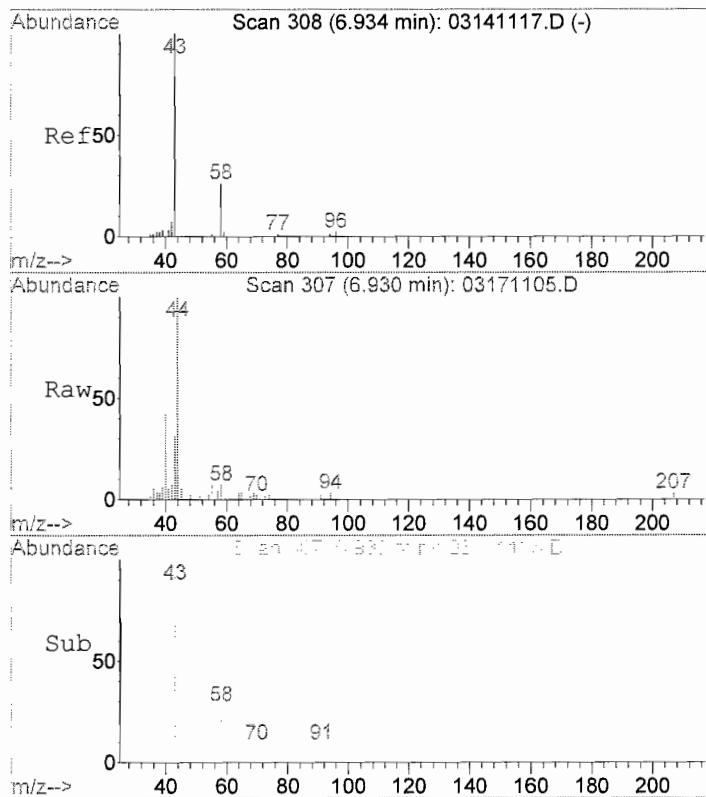
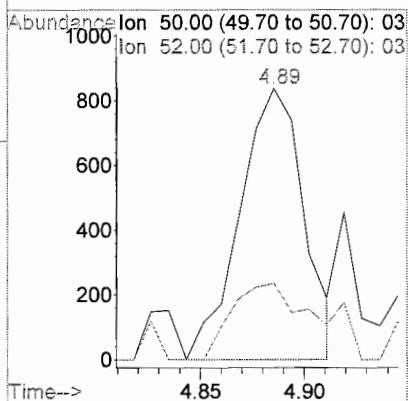
Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration





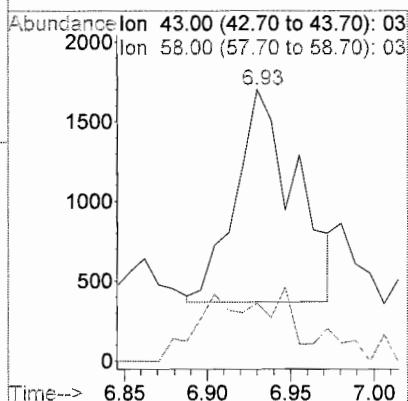
#3  
Chloromethane  
Concen: 0.14 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.4 38.2

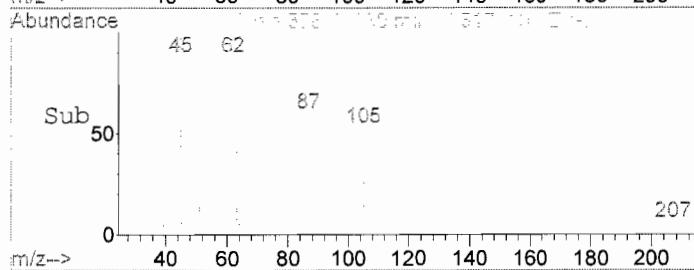
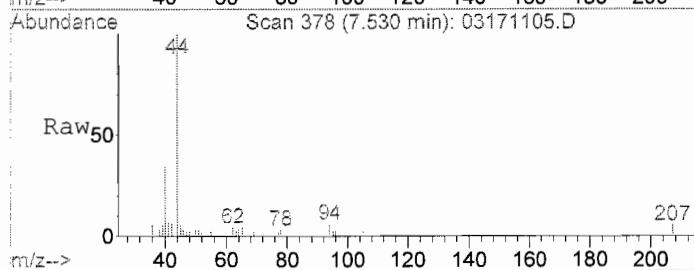
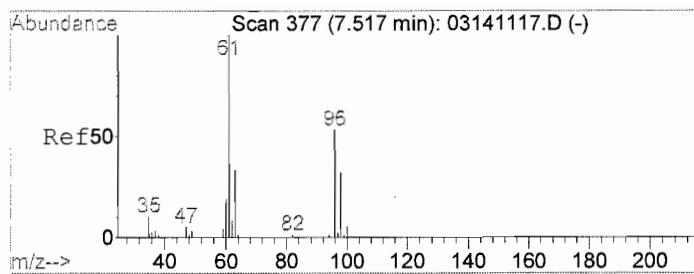


#8  
Acetone  
Concen: 0.96 ug/L  
RT: 6.93 min Scan# 307  
Delta R.T. -0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 20.4 30.6#

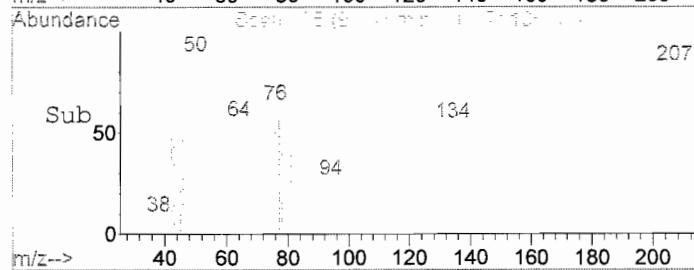
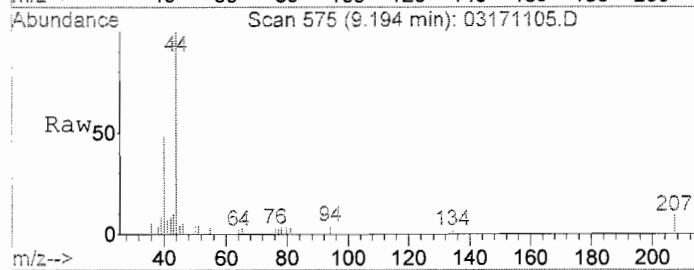
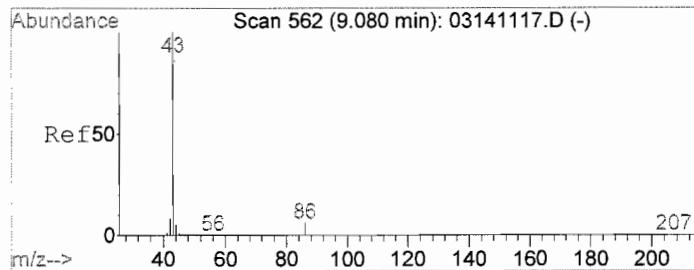
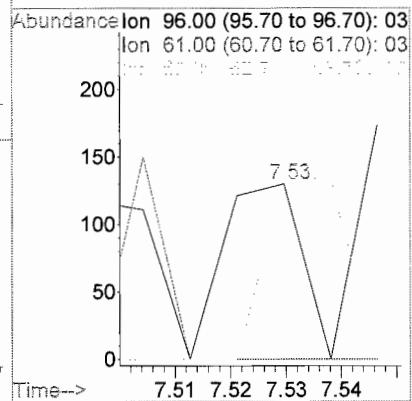


M1311M  
V



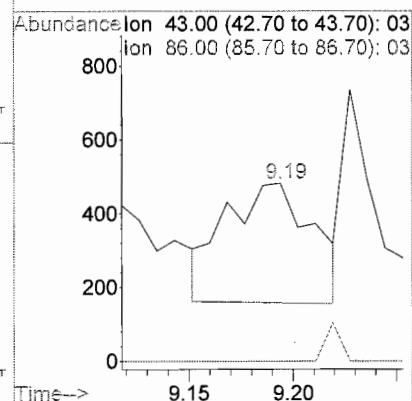
#10  
1,1-Dichloroethene  
Concen: Below Cal  
RT: 7.53 min Scan# 378  
Delta R.T. 0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

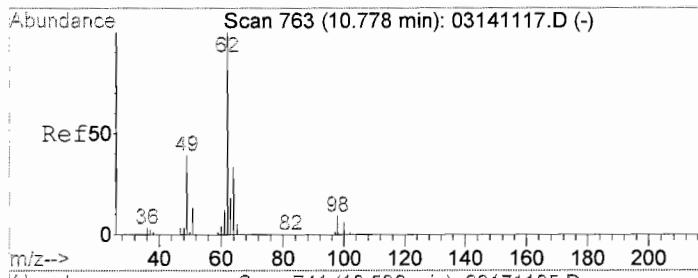
Tgt Ion: 96 Resp: 127  
Ion Ratio Lower Upper  
96 100  
61 0.0 164.0 246.0#  
63 107.1 51.4 77.0#



#17  
Vinyl acetate  
Concen: 0.10 ug/L  
RT: 9.19 min Scan# 575  
Delta R.T. 0.11 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

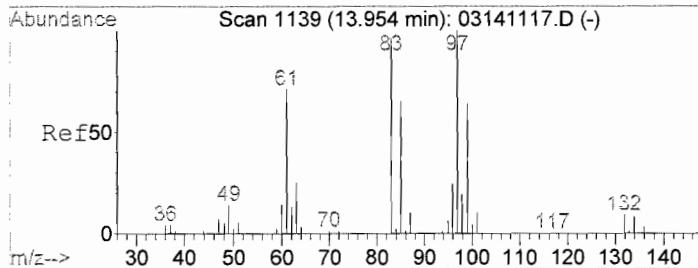
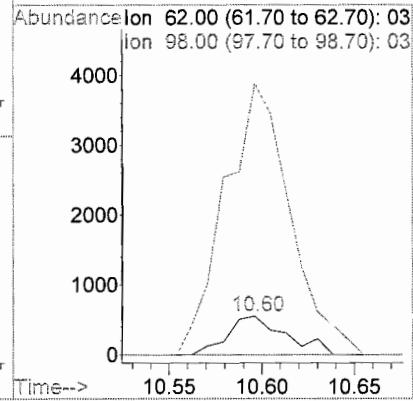
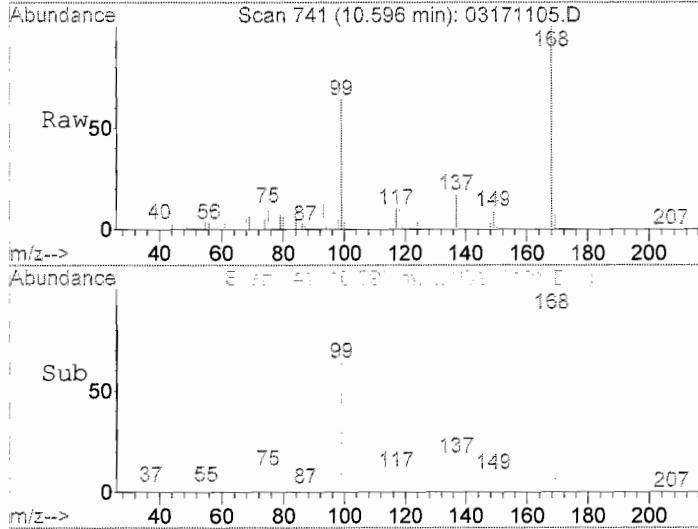
Tgt Ion: 43 Resp: 944  
Ion Ratio Lower Upper  
43 100  
86 0.0 4.7 7.1#





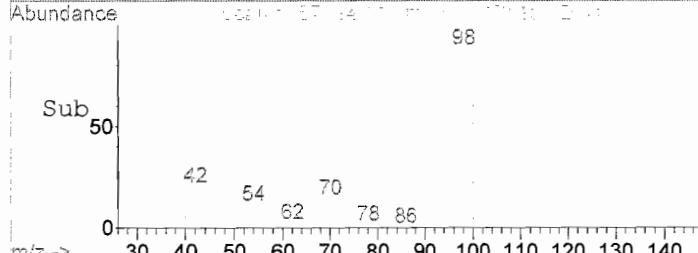
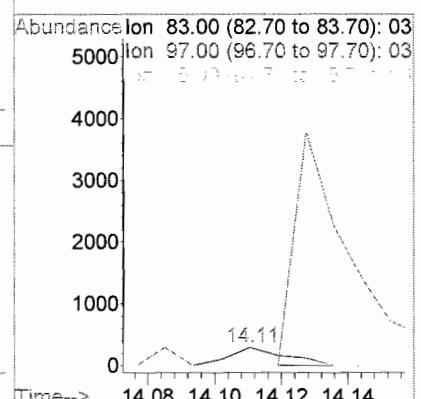
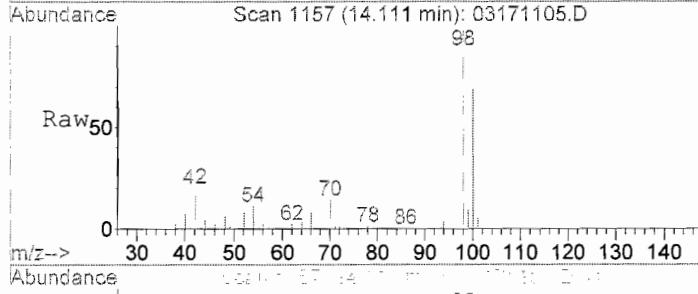
#24  
1,2-Dichloroethane  
Concen: 0.20 ug/L  
RT: 10.60 min Scan# 741  
Delta R.T. -0.18 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

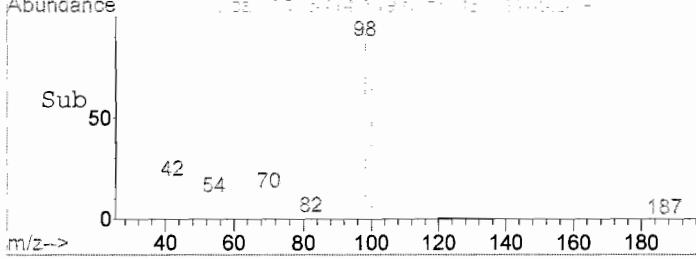
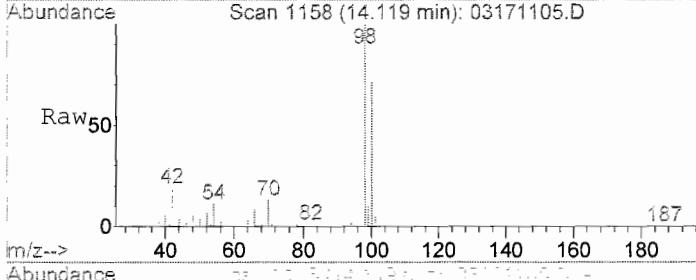
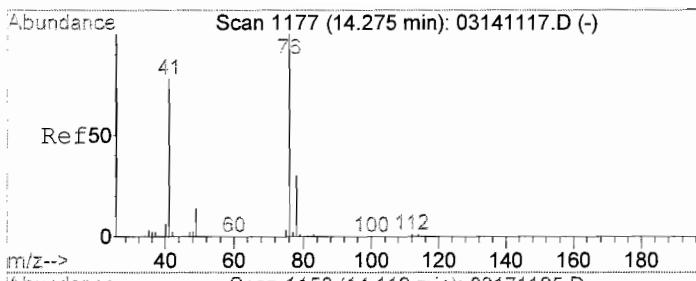
Tgt Ion: 62 Resp: 1206  
Ion Ratio Lower Upper  
62 100  
98 791.2 6.8 10.2#



#38  
1,1,2-Trichloroethane  
Concen: 0.11 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. 0.16 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

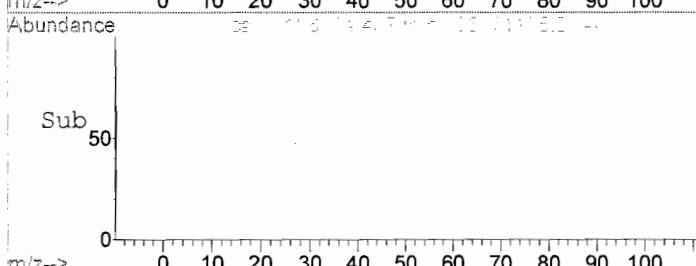
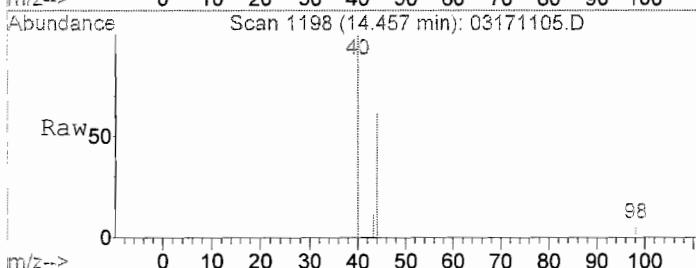
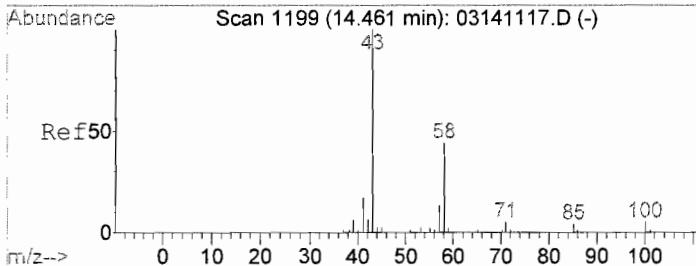
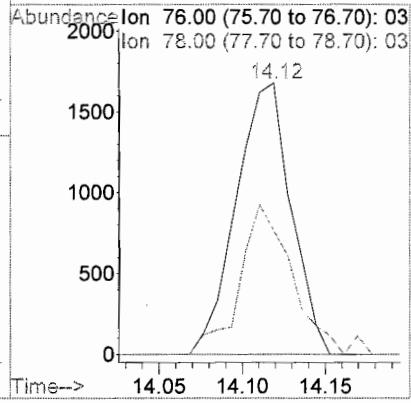
Tgt Ion: 83 Resp: 345  
Ion Ratio Lower Upper  
83 100  
97 1295.7 80.6 120.8#  
85 0.0 51.4 77.0#





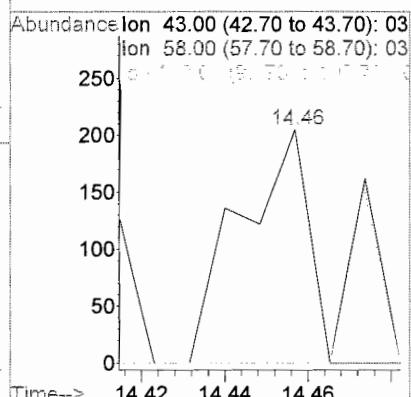
#42  
1,3-Dichloropropane  
Concen: 0.60 ug/L  
RT: 14.12 min Scan# 1158  
Delta R.T. -0.16 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

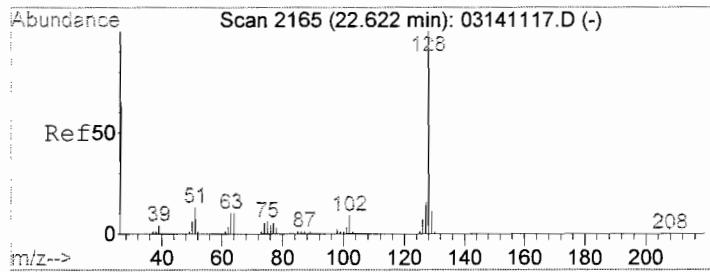
Tgt Ion: 76 Resp: 3863  
Ion Ratio Lower Upper  
76 100  
78 48.4 25.5 38.3#



#43  
2-Hexanone  
Concen: 0.11 ug/L  
RT: 14.46 min Scan# 1198  
Delta R.T. -0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

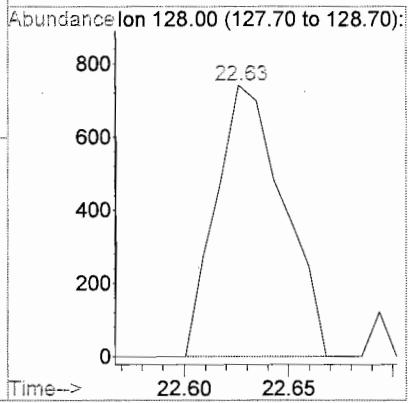
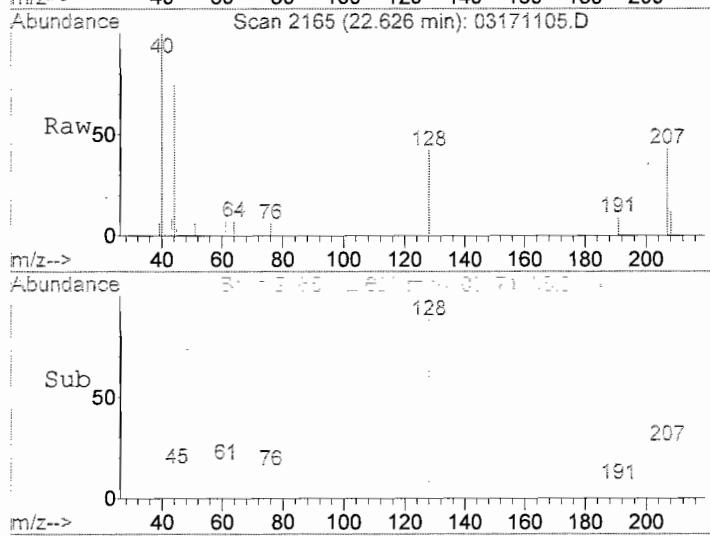
Tgt Ion: 43 Resp: 235  
Ion Ratio Lower Upper  
43 100  
58 0.0 34.8 52.2#  
100 0.0 0.0 0.0





#74  
Naphthalene  
Concen: 0.23 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

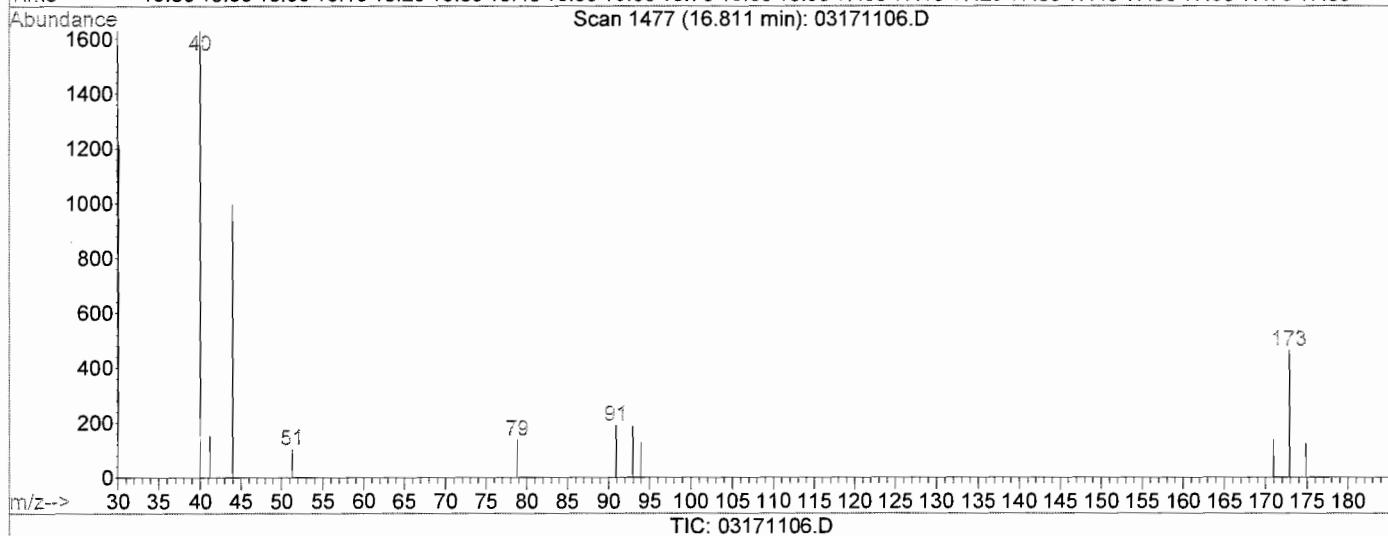
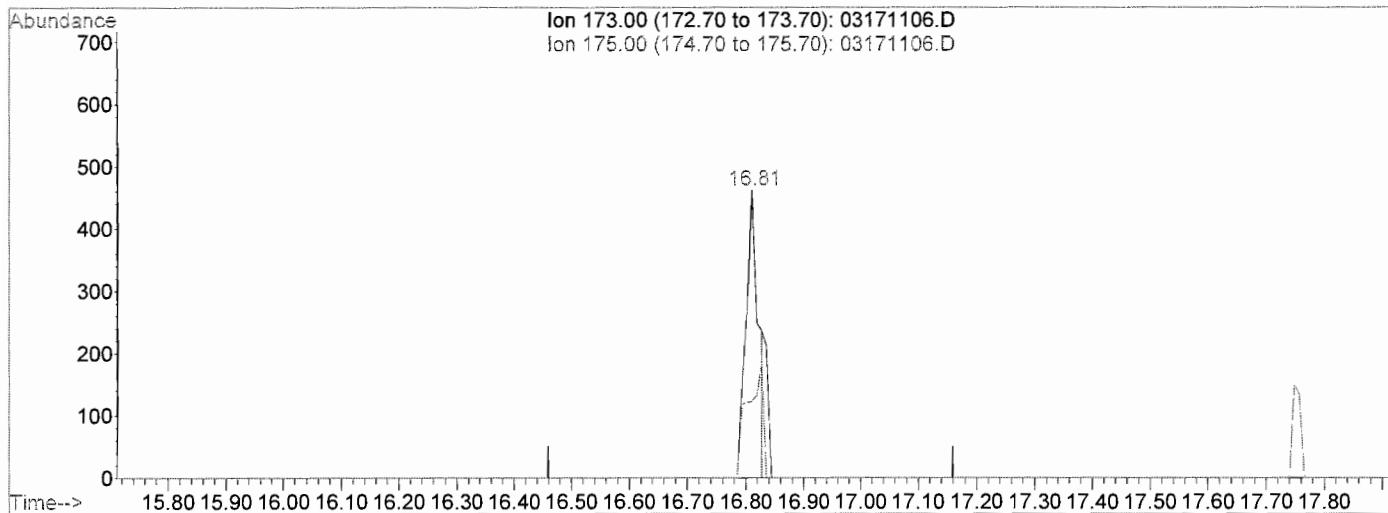
Tgt Ion:128 Resp: 1667



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:55 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.42ug/L

response 696

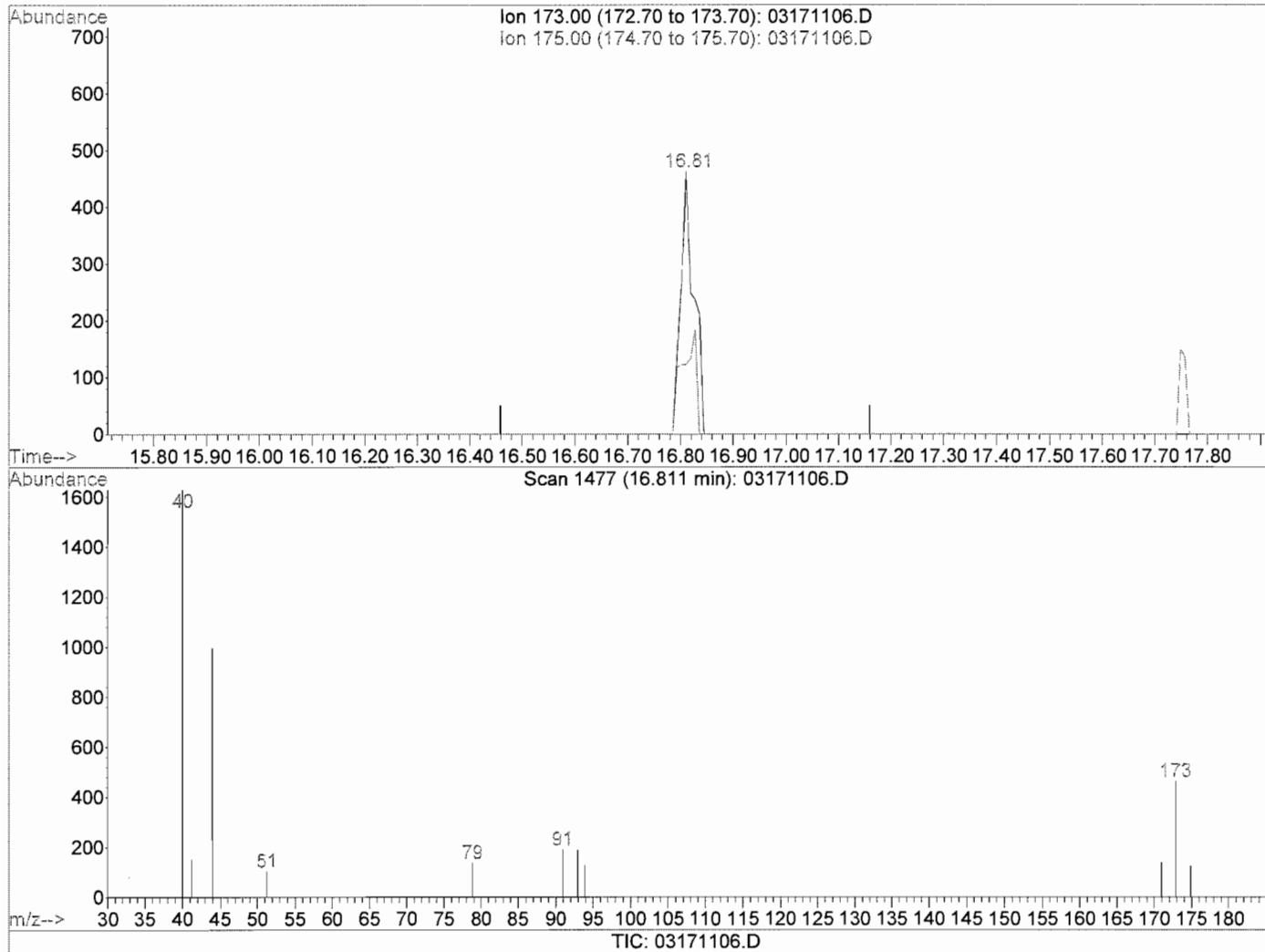
Ion	Exp%	Act%
173.00	100	100
175.00	50.90	23.13#
0.00	0.00	0.00
0.00	0.00	0.00

Before - SP

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.49ug/L m

response 803

Ion	Exp%	Act%
173.00	100	100
175.00	50.90	20.05#
0.00	0.00	0.00
0.00	0.00	0.00

After

W 3/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	2490	0.62	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.48%	
39) Toluene-d8	14.12	98	8971	0.63	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.52%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.65	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.60%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	4286	0.53	ug/L	92
3) Chloromethane	4.89	50	6587	0.58	ug/L	96
4) Vinyl chloride	5.18	62	6003	0.54	ug/L	90
5) Bromomethane	5.78	94	3084	0.62	ug/L	90
6) Chloroethane	5.97	64	3371	0.56	ug/L	# 75
7) Trichlorofluoromethane	6.77	101	4364	0.52	ug/L	93
8) Acetone	0.00	43	0	N.D.	d	
9) Iodomethane	7.58	142	1272	0.33	ug/L	95
10) 1,1-Dichloroethene	7.50	96	2883	0.40	ug/L	91
11) Methylene chloride	7.70	84	3890	0.70	ug/L	95
12) Freon 113	7.77	101	3509	0.65	ug/L	93
13) Carbon disulfide	8.02	76	10027	0.34	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 91
15) MTBE	8.73	73	5033	0.57	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.56	ug/L	97
17) Vinyl acetate	9.08	43	4816	0.58	ug/L	# 82
18) 2-Butanone (MEK)	9.46	72	199	0.70	ug/L	# 33
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	89
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 90
21) Chloroform	9.93	83	4941	0.56	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.52	ug/L	98
24) 1,2-Dichloroethane	10.77	62	2927	0.56	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.50	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	96
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.55	ug/L	100
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 86
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	99
32) Trichloroethene	12.27	95	2709	0.53	ug/L	97
33) Bromodichloromethane	12.33	83	3018	0.51	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	0.56	ug/L	# 56
35) cis-1,3-Dichloropropene	13.18	75	3500	0.49	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	0.00	43	0	N.D.	d	
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.50	ug/L	# 82
40) Toluene	14.21	92	6374	0.56	ug/L	98
42) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	98

(#) = qualifier out of range (m) = manual integration

03171106.D 031411.M Thu Mar 17 13:56:36 2011

~ 1/1/11  
 03/08/11  
 V Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

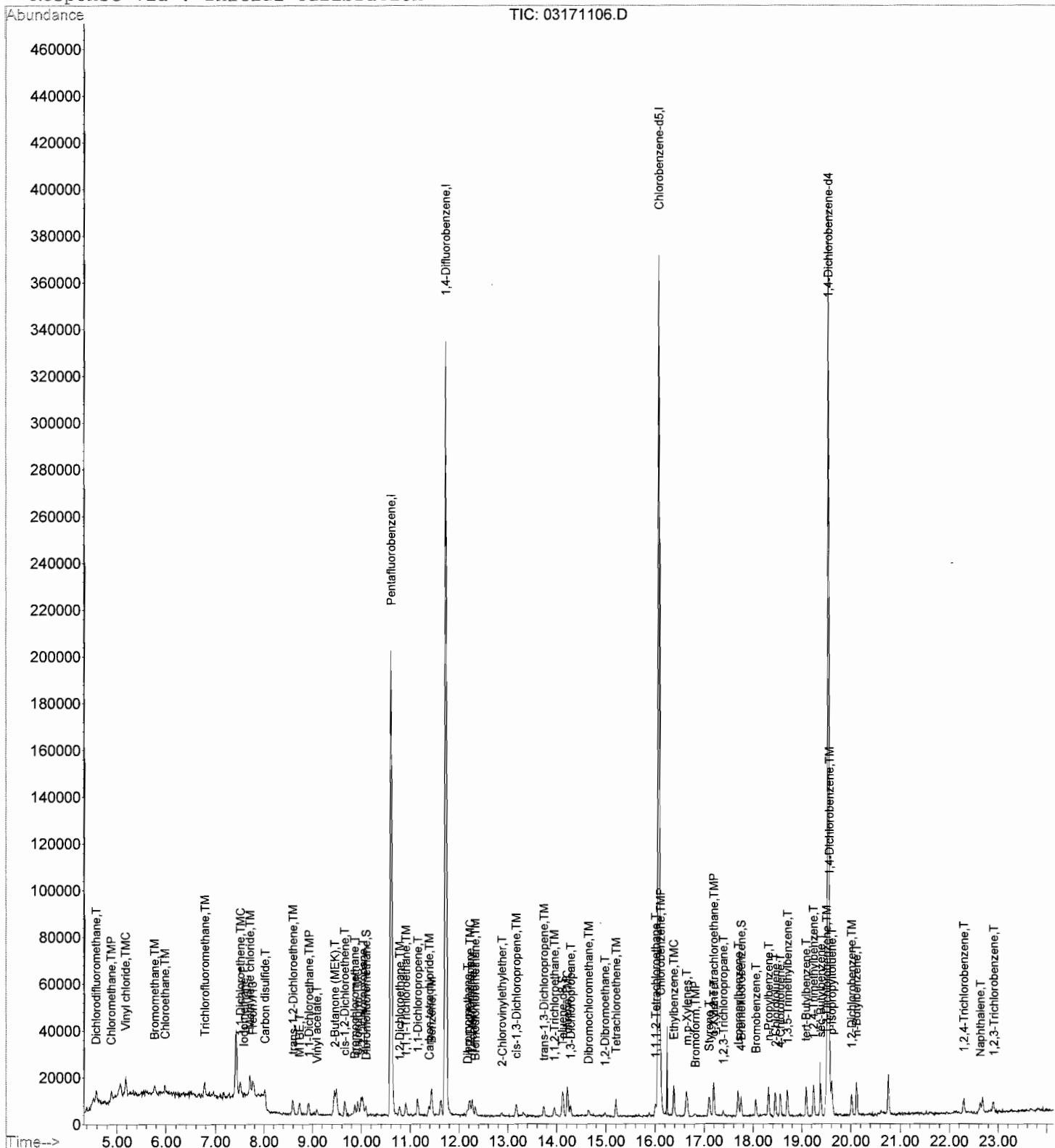
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	0.00	43	0	N.D.	d	
44) Dibromochloromethane	14.65	129	2052	0.64	ug/L	84
45) 1,2-Dibromoethane	14.98	107	1293	0.48	ug/L	#
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.59	ug/L	#
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.56	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.60	ug/L	94
51) Styrene	17.10	104	5086	0.44	ug/L	#
52) o-Xylene	17.20	106	4214	0.58	ug/L	99
55) Bromoform	16.81	173	803m	0.49	ug/L	
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	#
57) 1,2,3-Trichloropropane	17.38	110	276	0.38	ug/L	#
58) Isopropylbenzene	17.70	105	9284	0.51	ug/L	98
59) Bromobenzene	18.05	156	1904	0.47	ug/L	85
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	96
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.52	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.50	ug/L	97
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.51	ug/L	99
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	#
69) p-Isopropyltoluene	19.61	119	8395	0.48	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.55	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.49	ug/L	99
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	d	
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.42	ug/L	81
74) Naphthalene	22.63	128	4307	0.67	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	Below Cal	#	66
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.46	ug/L	87

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
Acq On : 17 Mar 2011 9:12 am Operator: LC  
Sample : 0.5 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

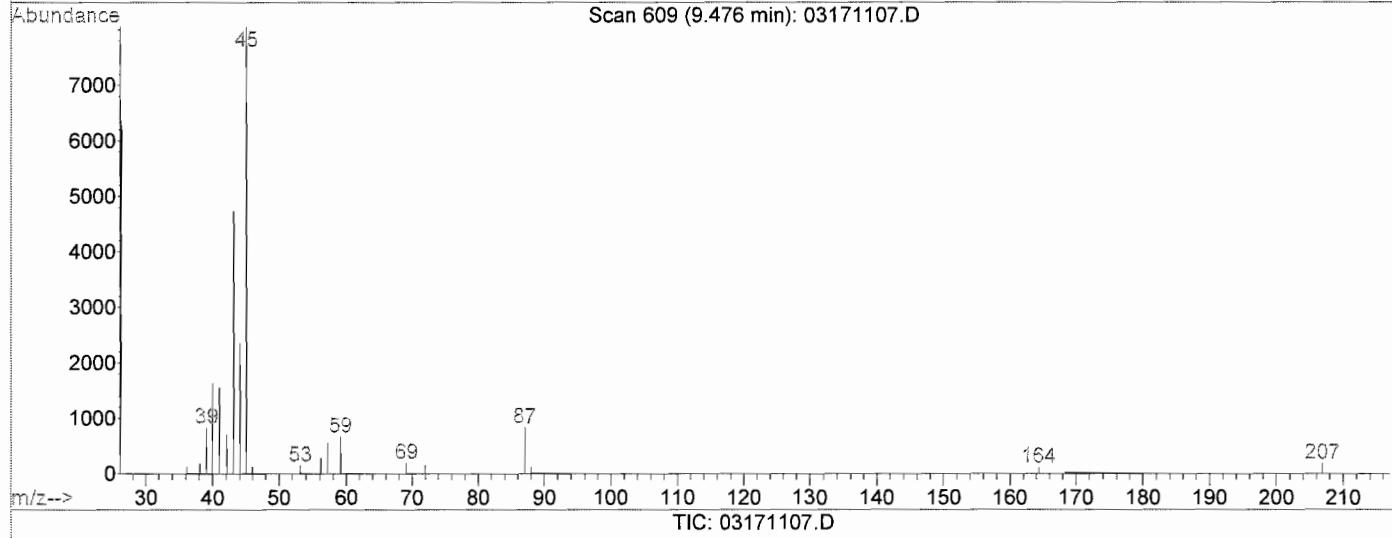
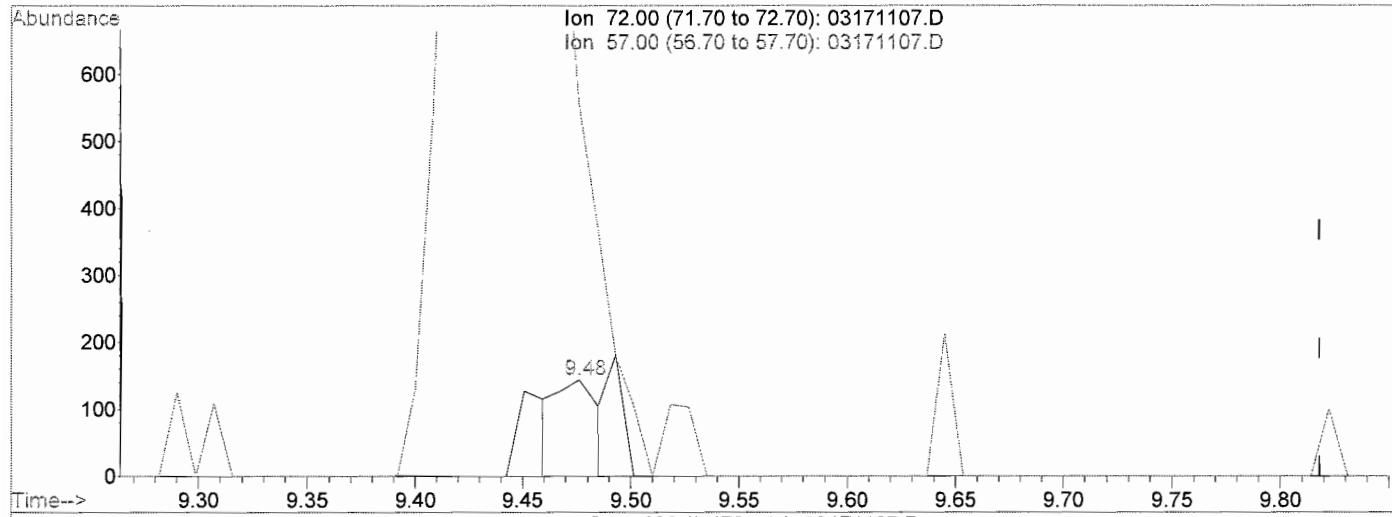
Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.48min 0.69ug/L

response 190

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Before - NIP

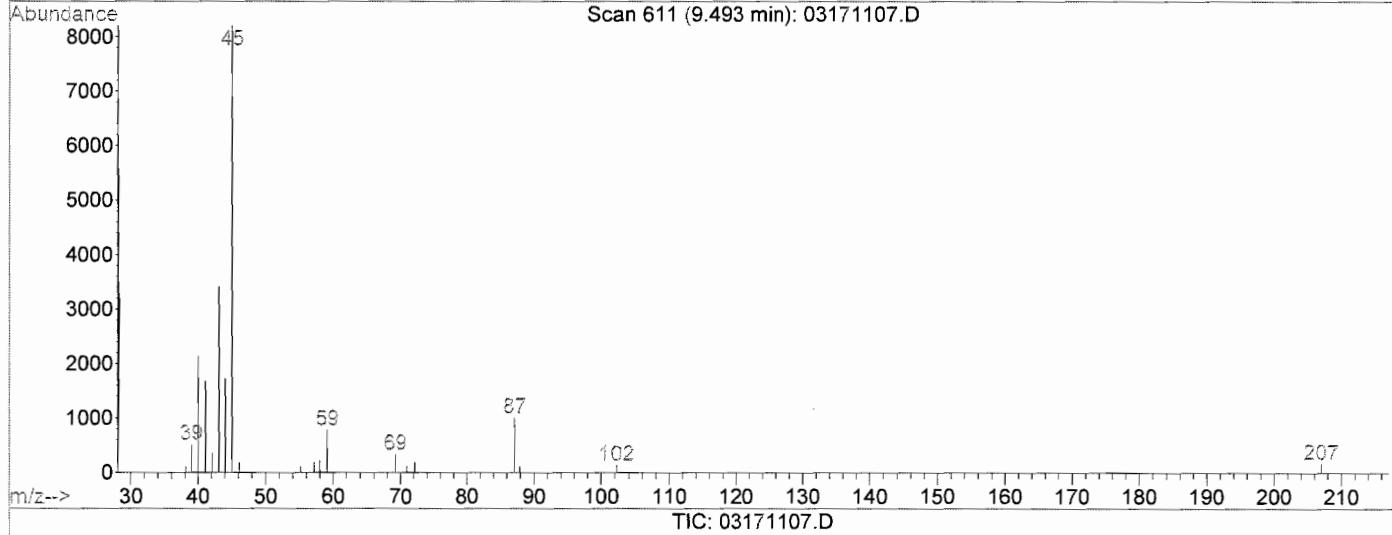
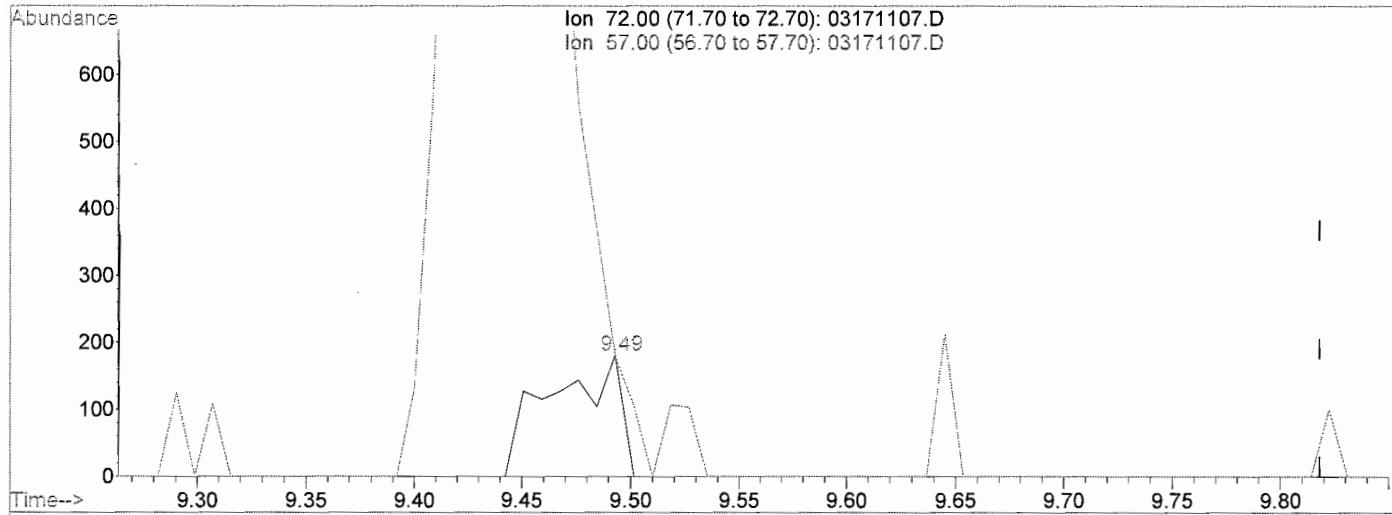
03/18/11

MH/MV

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.49min 1.46ug/L m

response 405

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

After

Va c3/8/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	3898	1.00	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.00%	
39) Toluene-d8	14.12	98	14880	1.07	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.28%	
53) 4-Bromofluorobenzene	17.76	95	5477	1.10	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.40%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.58	85	7417	0.94	ug/L 95
3) Chloromethane	4.89	50	11297	1.01	ug/L 99
4) Vinyl chloride	5.18	62	11731	1.07	ug/L # 84
5) Bromomethane	5.77	94	5200	1.07	ug/L 90
6) Chloroethane	5.98	64	6815	1.17	ug/L 90
7) Trichlorofluoromethane	6.77	101	8152	1.00	ug/L 92
8) Acetone	0.00	43	0	N.D.	d
9) Iodomethane	7.57	142	3864	1.02	ug/L # 83
10) 1,1-Dichloroethene	7.51	96	5486	1.05	ug/L 95
11) Methylene chloride	7.70	84	6767	1.24	ug/L 93
12) Freon 113	7.78	101	6284	1.18	ug/L 96
13) Carbon disulfide	8.02	76	17829	0.89	ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.20	ug/L 83
15) MTBE	8.73	73	10605	1.24	ug/L # 88
16) 1,1-Dichloroethane	8.92	63	12255	1.17	ug/L # 97
17) Vinyl acetate	9.09	43	9903	1.23	ug/L # 92
18) 2-Butanone (MEK)	9.49	72	405m	1.46	ug/L
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L 96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L 96
21) Chloroform	9.93	83	8465	0.98	ug/L 99
22) 2,2-Dichloropropane	10.03	77	6968	0.97	ug/L 92
24) 1,2-Dichloroethane	10.78	62	5936	1.16	ug/L # 76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.95	ug/L 95
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L # 94
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L 98
29) Benzene	11.44	78	20409	1.03	ug/L 98
30) Dibromomethane	12.17	93	2529	1.07	ug/L 96
31) 1,2-Dichloropropane	12.21	63	5383	0.97	ug/L # 88
32) Trichloroethene	12.26	95	4847	0.97	ug/L 95
33) Bromodichloromethane	12.32	83	5644	0.97	ug/L 87
34) 2-Chlorovinylethylether	12.86	63	1739	1.28	ug/L # 82
35) cis-1,3-Dichloropropene	13.18	75	6952	0.99	ug/L 94
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.11	ug/L # 89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L 99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.97	ug/L # 82
40) Toluene	14.22	92	10459	0.94	ug/L 91
42) 1,3-Dichloropropane	14.27	76	5543	0.99	ug/L # 73

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

VC 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

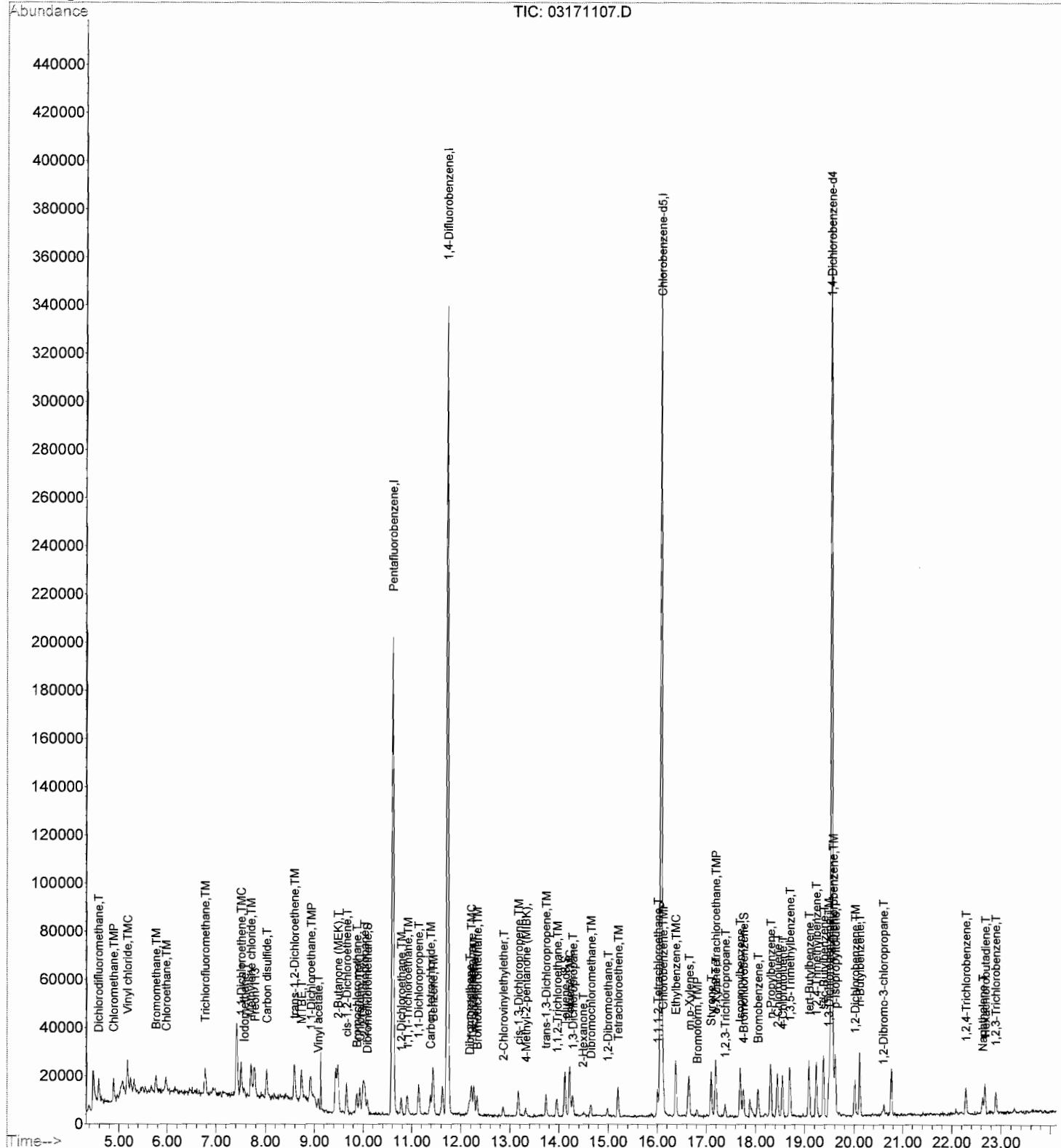
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.31	ug/L #	77
44) Dibromochloromethane	14.65	129	2863	0.89	ug/L	98
45) 1,2-Dibromoethane	14.98	107	2446	0.90	ug/L #	78
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	93
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.03	ug/L #	58
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	92
49) Ethylbenzene	16.38	91	20598	0.97	ug/L	99
50) m,p-Xylenes	16.64	106	6910	0.93	ug/L	92
51) Styrene	17.10	104	10355	0.90	ug/L	98
52) o-Xylene	17.20	106	7210	1.00	ug/L	90
55) Bromoform	16.81	173	1545	0.97	ug/L #	72
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L #	89
57) 1,2,3-Trichloropropane	17.38	110	807	1.14	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.92	ug/L	100
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.96	ug/L	99
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.94	ug/L	96
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.95	ug/L	100
66) sec-Butylbenzene	19.38	105	21187	0.96	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	93
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	98
69) p-Isopropyltoluene	19.61	119	15312	0.90	ug/L	98
70) 1,2-Dichlorobenzene	20.02	146	6687	0.96	ug/L	99
71) n-Butylbenzene	20.11	91	17346	0.92	ug/L	96
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.90	ug/L	89
73) 1,2,4-Trichlorobenzene	22.28	180	4683	0.95	ug/L	94
74) Naphthalene	22.63	128	5978	0.95	ug/L	100
75) Hexachlorobutadiene	22.68	225	2850	0.43	ug/L	90
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.84	ug/L	94

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 13:57 2011 Quant Results File: 031411.RES

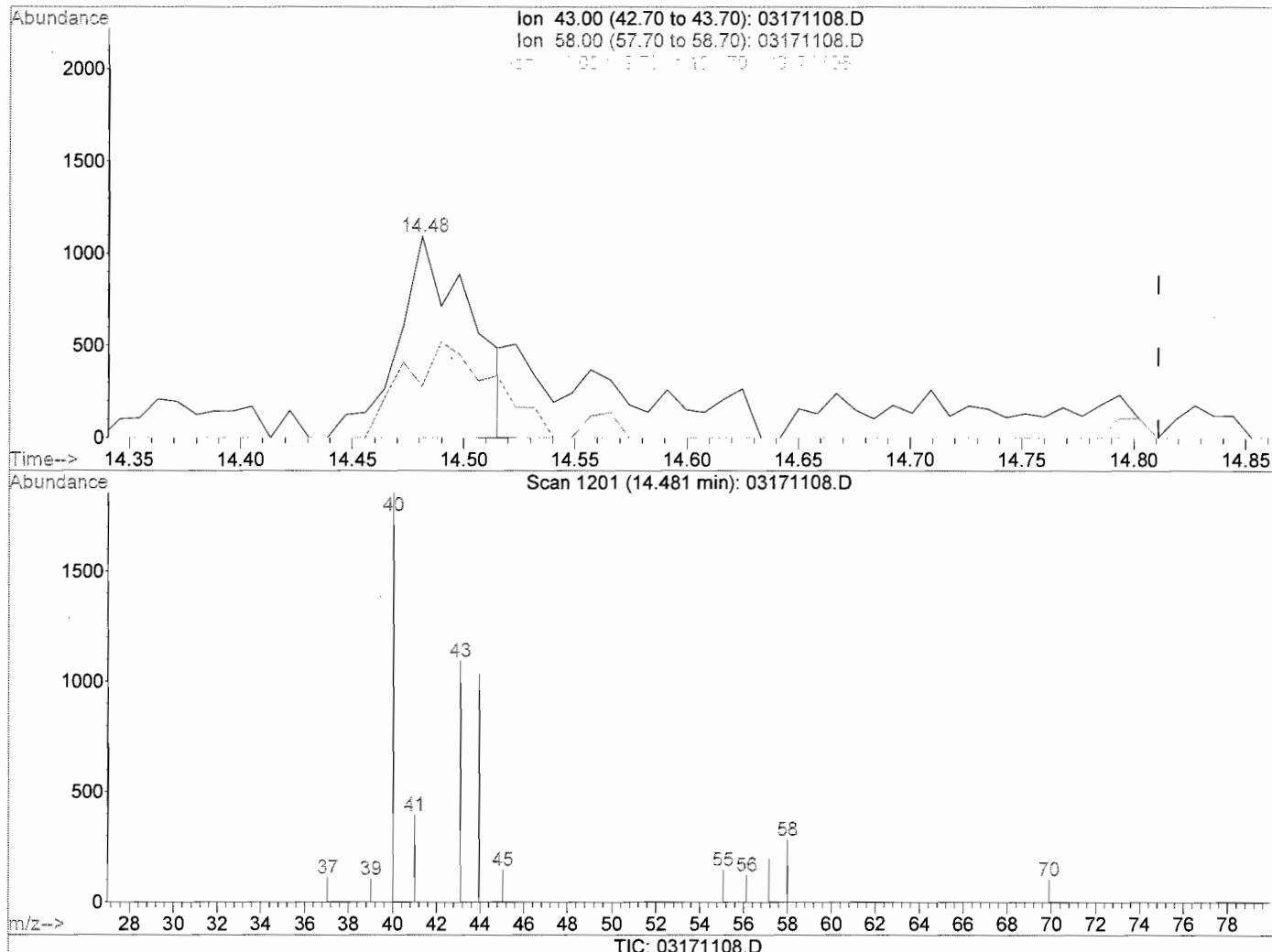
Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.28ug/L

response 2474

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	39.81
100.00	0.00	0.00
0.00	0.00	0.00

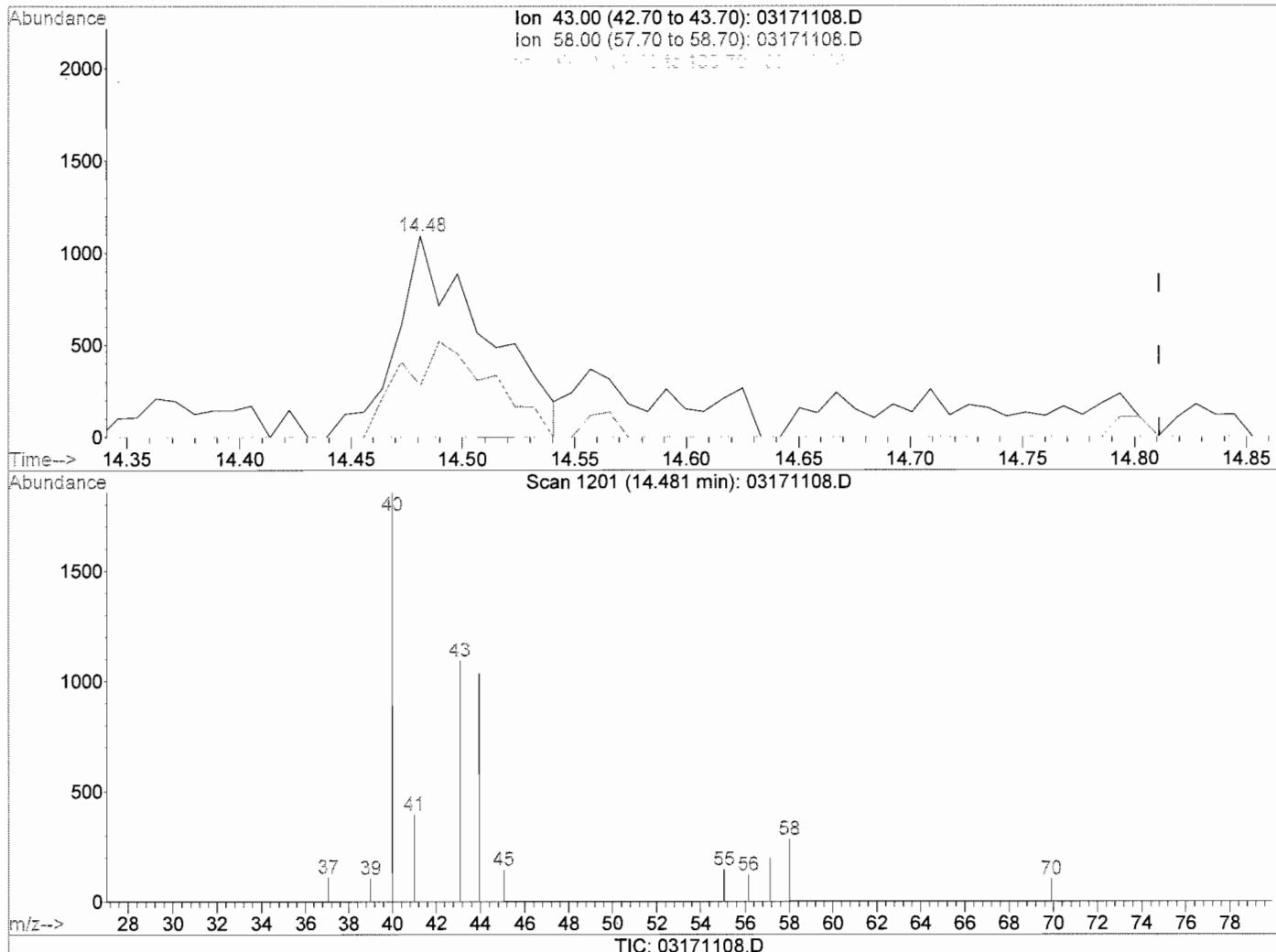
Before - NIP

3/17/11 03/18/11

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.55ug/L m

response 2999

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	32.84#
100.00	0.00	0.00
0.00	0.00	0.00

After

MJ

VE 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	7767	1.95	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.80%	
39) Toluene-d8	14.12	98	28802	2.04	ug/L	0.00
Spiked Amount 25.000			Recovery	=	8.16%	
53) 4-Bromofluorobenzene	17.75	95	10411	2.08	ug/L	0.00
Spiked Amount 25.000			Recovery	=	8.32%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	15723	1.95	ug/L	94
3) Chloromethane	4.89	50	22795	2.00	ug/L	97
4) Vinyl chloride	5.18	62	22297	2.00	ug/L	95
5) Bromomethane	5.77	94	6970	1.41	ug/L	95
6) Chloroethane	5.98	64	11754	1.97	ug/L	# 85
7) Trichlorofluoromethane	6.78	101	16143	1.94	ug/L	100
8) Acetone	6.94	43	4997	2.62	ug/L	97
9) Iodomethane	7.57	142	5343	1.38	ug/L	96
10) 1,1-Dichloroethene	7.51	96	8308	1.69	ug/L	98
11) Methylene chloride	7.71	84	10726	1.93	ug/L	97
12) Freon 113	7.77	101	10221	1.89	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.70	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.85	ug/L	97
15) MTBE	8.73	73	16615	1.90	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.93	ug/L	99
17) Vinyl acetate	9.08	43	14566	1.77	ug/L	# 95
18) 2-Butanone (MEK)	9.47	72	179	0.63	ug/L	# 1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.03	ug/L	91
20) Bromochloromethane	9.88	128	3627	1.82	ug/L	89
21) Chloroform	9.93	83	18162	2.07	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.91	ug/L	96
24) 1,2-Dichloroethane	10.78	62	10721	2.06	ug/L	# 94
25) 1,1,1-Trichloroethane	10.91	97	12034	1.83	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	99
28) Carbon tetrachloride	11.38	117	9830	1.86	ug/L	94
29) Benzene	11.44	78	39494	1.97	ug/L	99
30) Dibromomethane	12.17	93	4597	1.92	ug/L	90
31) 1,2-Dichloropropane	12.22	63	10960	1.95	ug/L	# 94
32) Trichloroethene	12.27	95	9761	1.93	ug/L	94
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	96
34) 2-Chlorovinylethylether	12.87	63	2637	1.91	ug/L	# 85
35) cis-1,3-Dichloropropene	13.16	75	13465	1.88	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.68	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.85	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.91	ug/L	94
40) Toluene	14.21	92	22811	2.03	ug/L	97
42) 1,3-Dichloropropane	14.28	76	10418	1.86	ug/L	92

(#) = qualifier out of range (m) = manual integration

03171108.D 031411.M Thu Mar 17 13:59:31 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

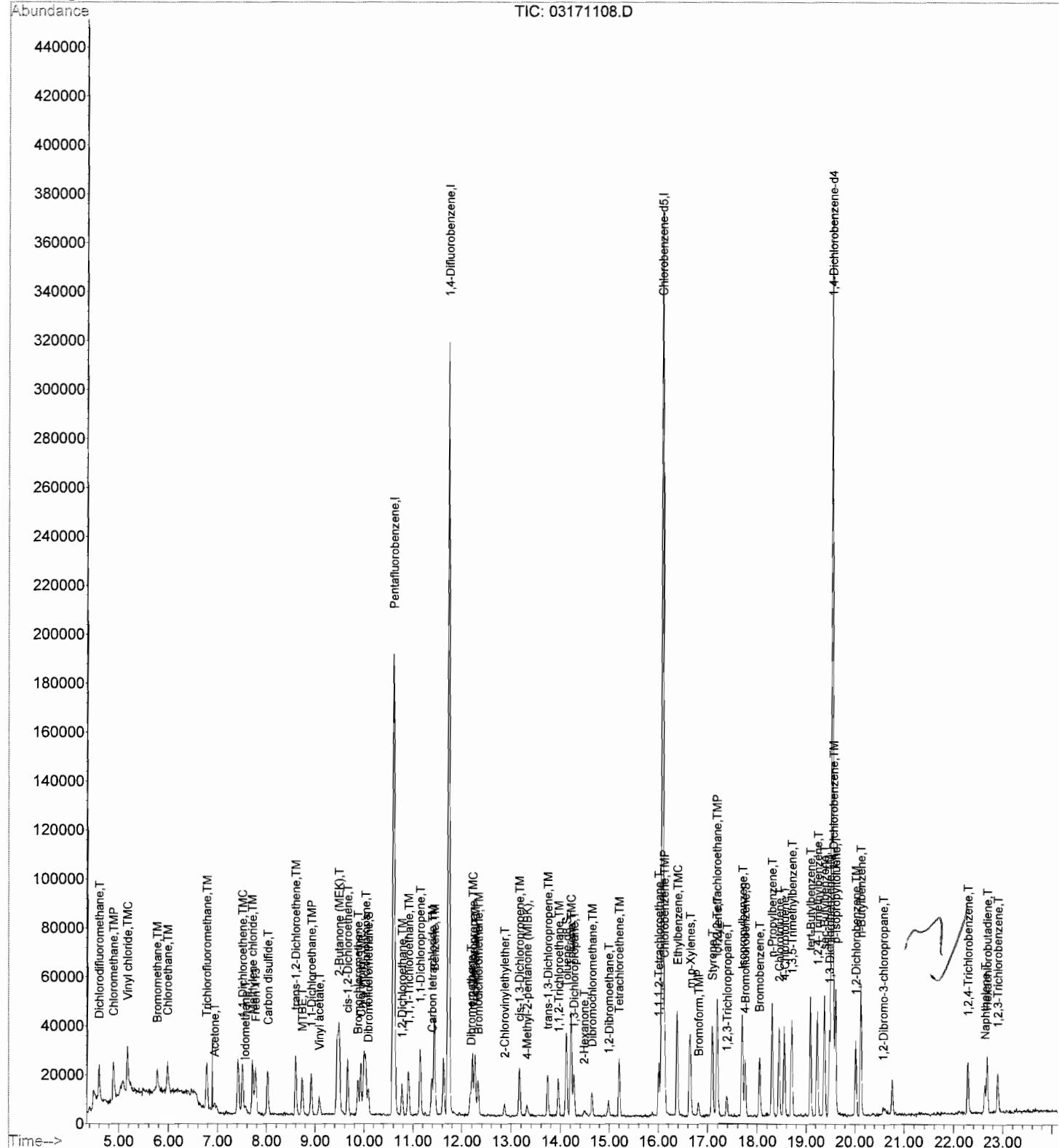
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2999m	1.55	ug/L	
44) Dibromochloromethane	14.65	129	6238	1.94	ug/L	97
45) 1,2-Dibromoethane	14.99	107	5443	1.99	ug/L #	100
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.94	ug/L	95
48) Chlorobenzene	16.12	112	21803	1.89	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.91	ug/L	99
50) m,p-Xylenes	16.64	106	14567	1.95	ug/L	99
51) Styrene	17.09	104	21955	1.91	ug/L	100
52) o-Xylene	17.19	106	14080	1.95	ug/L	98
55) Bromoform	16.81	173	2978	1.87	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	95
57) 1,2,3-Trichloropropane	17.40	110	1450	2.05	ug/L	99
58) Isopropylbenzene	17.69	105	34246	1.94	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	98
60) n-Propylbenzene	18.30	91	47531	1.91	ug/L	99
61) 2-Chlorotoluene	18.44	91	27642	1.93	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	99
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.90	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.89	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.92	ug/L	96
66) sec-Butylbenzene	19.38	105	43119	1.97	ug/L	96
67) 1,3-Dichlorobenzene	19.48	146	16064	1.97	ug/L	96
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	97
69) p-Isopropyltoluene	19.61	119	32053	1.88	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	13744	1.99	ug/L	99
71) n-Butylbenzene	20.12	91	35106	1.86	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.24	ug/L #	75
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.70	ug/L	96
74) Naphthalene	22.63	128	10824	1.73	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.50	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.72	ug/L	94

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
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1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	22772	5.84	ug/L	0.00
Spiked Amount	25.000		Recovery	=	23.36%	
39) Toluene-d8	14.12	98	75601	5.34	ug/L	0.00
Spiked Amount	25.000		Recovery	=	21.36%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.46	ug/L	0.00
Spiked Amount	25.000		Recovery	=	21.84%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	43993	5.56	ug/L	98
3) Chloromethane	4.90	50	69304	6.20	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.46	ug/L	97
5) Bromomethane	5.77	94	23286	4.82	ug/L	97
6) Chloroethane	5.98	64	31380	5.37	ug/L	97
7) Trichlorofluoromethane	6.78	101	44900	5.49	ug/L	98
8) Acetone	6.94	43	8551	5.67	ug/L	96
9) Iodomethane	7.57	142	19144	5.06	ug/L	100
10) 1,1-Dichloroethene	7.51	96	23635	5.45	ug/L	96
11) Methylene chloride	7.71	84	29505	5.41	ug/L	98
12) Freon 113	7.78	101	28220	5.32	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.39	ug/L	89
15) MTBE	8.74	73	47481	5.54	ug/L	98
16) 1,1-Dichloroethane	8.92	63	57409	5.51	ug/L	100
17) Vinyl acetate	9.09	43	45219	5.60	ug/L	97
18) 2-Butanone (MEK)	9.47	72	1224	4.43	ug/L	# 38
19) cis-1,2-Dichloroethene	9.66	96	29437	5.59	ug/L	93
20) Bromochloromethane	9.87	128	11063	5.67	ug/L	98
21) Chloroform	9.93	83	49311	5.72	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.50	ug/L	98
24) 1,2-Dichloroethane	10.78	62	29254	5.73	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.44	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.37	ug/L	98
29) Benzene	11.44	78	106054	5.27	ug/L	99
30) Dibromomethane	12.17	93	12758	5.32	ug/L	96
31) 1,2-Dichloropropane	12.21	63	30926	5.49	ug/L	98
32) Trichloroethene	12.26	95	27719	5.47	ug/L	93
33) Bromodichloromethane	12.33	83	32710	5.51	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.30	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	39480	5.52	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	4.84	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.29	ug/L	99
40) Toluene	14.21	92	60380	5.37	ug/L	100
42) 1,3-Dichloropropane	14.27	76	31749	5.61	ug/L	96

(#= qualifier out of range (m)= manual integration

03171109.D 031411.M Thu Mar 17 14:00:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

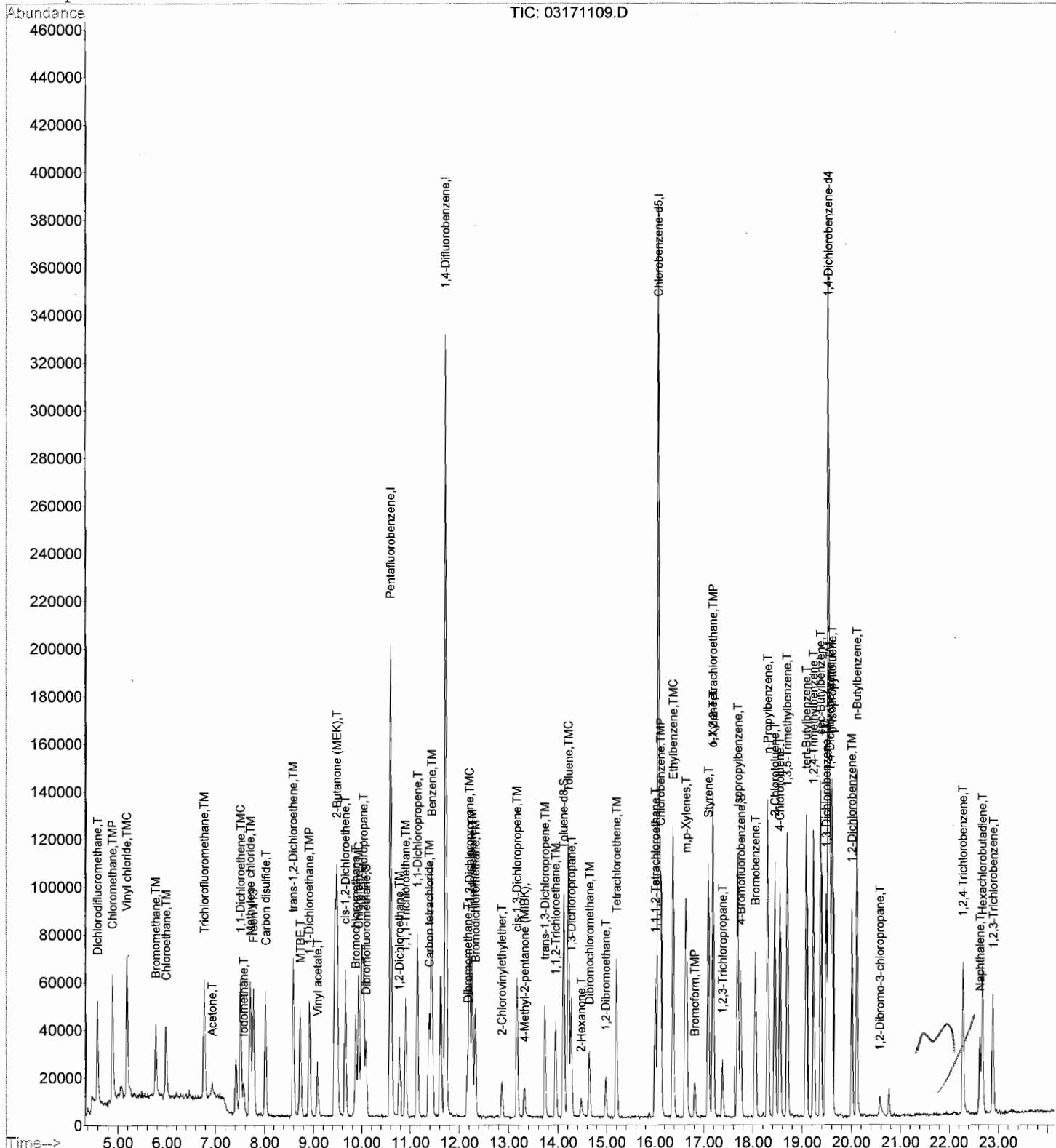
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.44	ug/L	# 92
44) Dibromochloromethane	14.64	129	17145	5.27	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.75	ug/L	# 97
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.20	ug/L	97
48) Chlorobenzene	16.12	112	60084	5.16	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.23	ug/L	100
50) m,p-Xylenes	16.64	106	39718	5.25	ug/L	100
51) Styrene	17.09	104	62548	5.37	ug/L	99
52) o-Xylene	17.20	106	38050	5.20	ug/L	99
55) Bromoform	16.81	173	9209	5.63	ug/L	92
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	4203	5.79	ug/L	86
58) Isopropylbenzene	17.69	105	91339	5.05	ug/L	98
59) Bromobenzene	18.05	156	21568	5.28	ug/L	97
60) n-Propylbenzene	18.30	91	134531	5.26	ug/L	97
61) 2-Chlorotoluene	18.45	91	75803	5.15	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.14	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.03	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.03	ug/L	100
66) sec-Butylbenzene	19.37	105	115485	5.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	42641	5.08	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.00	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.39	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.16	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.80	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	24323	4.82	ug/L	99
74) Naphthalene	22.63	128	32491	5.06	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.71	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	20581	4.91	ug/L	98

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
Acq On : 17 Mar 2011 10:45 am Operator: LC  
Sample : 5.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	42710	10.76	ug/L	0.00
Spiked Amount 25.000			Recovery	=	43.04%	
39) Toluene-d8	14.12	98	143321	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.72%	
53) 4-Bromofluorobenzene	17.75	95	50923	10.16	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.64%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	79957	9.93	ug/L	100
3) Chloromethane	4.89	50	135497	11.91	ug/L	99
4) Vinyl chloride	5.19	62	111850	10.07	ug/L	100
5) Bromomethane	5.78	94	53427	10.86	ug/L	91
6) Chloroethane	5.98	64	63788	10.72	ug/L	98
7) Trichlorofluoromethane	6.78	101	85392	10.27	ug/L	99
8) Acetone	6.94	43	11502	8.08	ug/L	97
9) Iodomethane	7.57	142	36401	9.45	ug/L	95
10) 1,1-Dichloroethene	7.51	96	46909	10.89	ug/L	94
11) Methylene chloride	7.71	84	55460	9.98	ug/L	99
12) Freon 113	7.78	101	52409	9.70	ug/L	99
13) Carbon disulfide	8.03	76	162804	10.64	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.90	ug/L	94
15) MTBE	8.74	73	84759	9.71	ug/L	96
16) 1,1-Dichloroethane	8.92	63	108838	10.26	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.96	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	9.44	ug/L	88
19) cis-1,2-Dichloroethene	9.66	96	53573	9.99	ug/L	98
20) Bromochloromethane	9.88	128	20976	10.55	ug/L	100
21) Chloroform	9.93	83	95119	10.84	ug/L	100
22) 2,2-Dichloropropane	10.04	77	73939	10.10	ug/L	98
24) 1,2-Dichloroethane	10.77	62	53618	10.31	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	66517	10.14	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.21	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.31	ug/L	98
29) Benzene	11.44	78	201076	10.05	ug/L	100
30) Dibromomethane	12.17	93	24596	10.31	ug/L	96
31) 1,2-Dichloropropane	12.21	63	55294	9.87	ug/L	100
32) Trichloroethene	12.27	95	49861	9.89	ug/L	98
33) Bromodichloromethane	12.33	83	60334	10.22	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	9.32	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	73950	10.38	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.23	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.24	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	27640	10.13	ug/L	97
40) Toluene	14.21	92	114354	10.22	ug/L	100
42) 1,3-Dichloropropane	14.27	76	56624	10.10	ug/L	98

(#) = qualifier out of range (m) = manual integration

03171110.D 031411.M Thu Mar 17 14:00:50 2011

3/11/11  
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## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

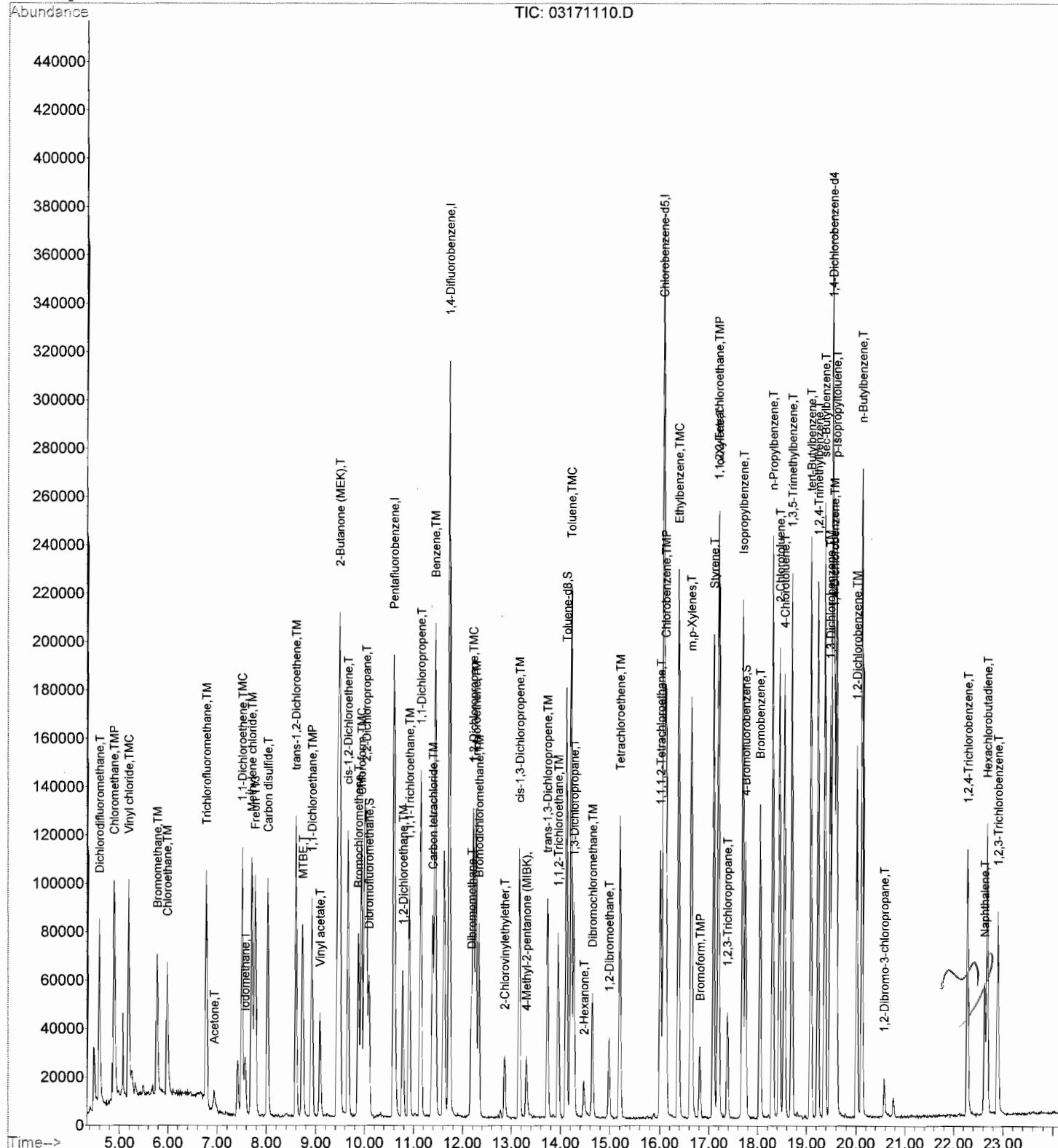
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.10	ug/L	# 96
44) Dibromochloromethane	14.64	129	32389	10.06	ug/L	100
45) 1,2-Dibromoethane	14.98	107	28536	10.44	ug/L	98
46) Tetrachloroethene	15.21	166	44478	10.14	ug/L	98
47) 1,1,2-Tetrachloroethane	16.01	131	35495	10.14	ug/L	99
48) Chlorobenzene	16.12	112	113625	9.85	ug/L	100
49) Ethylbenzene	16.38	91	215370	10.13	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.90	ug/L	98
51) Styrene	17.09	104	115227	9.99	ug/L	98
52) o-Xylene	17.20	106	71920	9.92	ug/L	97
55) Bromoform	16.81	173	16316	10.52	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 99
57) 1,2,3-Trichloropropane	17.39	110	7243	10.53	ug/L	96
58) Isopropylbenzene	17.69	105	176438	10.28	ug/L	100
59) Bromobenzene	18.05	156	40825	10.54	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.34	ug/L	98
61) 2-Chlorotoluene	18.45	91	143783	10.30	ug/L	100
62) 4-Chlorotoluene	18.55	91	141563	10.15	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.35	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.22	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.05	ug/L	99
66) sec-Butylbenzene	19.37	105	214687	10.06	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	80400	10.10	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.18	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	69024	10.25	ug/L	99
71) n-Butylbenzene	20.12	91	183374	10.00	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	11.01	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	41924	8.76	ug/L	100
74) Naphthalene	22.63	128	55616	9.13	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.49	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	34759	8.75	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
Acq On : 17 Mar 2011 11:15 am Operator: LC  
Sample : 10 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	103380	26.41	ug/L	0.00
Spiked Amount 25.000			Recovery	= 105.64%		
39) Toluene-d8	14.12	98	359841	25.92	ug/L	0.00
Spiked Amount 25.000			Recovery	= 103.68%		
53) 4-Bromofluorobenzene	17.75	95	128707	25.94	ug/L	0.00
Spiked Amount 25.000			Recovery	= 103.76%		

## Target Compounds

2) Dichlorodifluoromethane	4.60	85	200064	25.20	ug/L	98
3) Chloromethane	4.89	50	322628	28.77	ug/L	99
4) Vinyl chloride	5.18	62	283499	25.90	ug/L	100
5) Bromomethane	5.78	94	141242	29.13	ug/L	96
6) Chloroethane	5.98	64	150117	25.60	ug/L	98
7) Trichlorofluoromethane	6.78	101	214158	26.12	ug/L	99
8) Acetone	6.94	43	25928	23.73	ug/L	98
9) Iodomethane	7.57	142	98109	25.84	ug/L	97
10) 1,1-Dichloroethene	7.51	96	111502	26.67	ug/L	98
11) Methylene chloride	7.71	84	132209	24.14	ug/L	99
12) Freon 113	7.77	101	133636	25.10	ug/L	98
13) Carbon disulfide	8.03	76	401884	27.15	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.92	ug/L	98
15) MTBE	8.74	73	214946	24.98	ug/L	99
16) 1,1-Dichloroethane	8.92	63	264682	25.31	ug/L	99
17) Vinyl acetate	9.08	43	202265	24.98	ug/L	99
18) 2-Butanone (MEK)	9.47	72	6903	24.88	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	131490	24.87	ug/L	99
20) Bromochloromethane	9.87	128	47437	24.21	ug/L	94
21) Chloroform	9.93	83	218360	25.26	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	24.96	ug/L	98
24) 1,2-Dichloroethane	10.78	62	136474	26.62	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	162207	25.09	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.70	ug/L	99
28) Carbon tetrachloride	11.39	117	133369	25.74	ug/L	100
29) Benzene	11.44	78	490622	24.87	ug/L	99
30) Dibromomethane	12.17	93	58067	24.68	ug/L	98
31) 1,2-Dichloropropane	12.21	63	140014	25.35	ug/L	99
32) Trichloroethene	12.27	95	124690	25.08	ug/L	98
33) Bromodichloromethane	12.33	83	150764	25.89	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	21.41	ug/L	98
35) cis-1,3-Dichloropropene	13.16	75	183565	26.14	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	23.09	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.77	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	24.66	ug/L	98
40) Toluene	14.21	92	282149	25.56	ug/L	98
42) 1,3-Dichloropropane	14.27	76	140210	25.26	ug/L	98

(#) = qualifier out of range (m) = manual integration

03171111.D 031411.M Thu Mar 17 14:01:22 2011

3/18/11  
03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

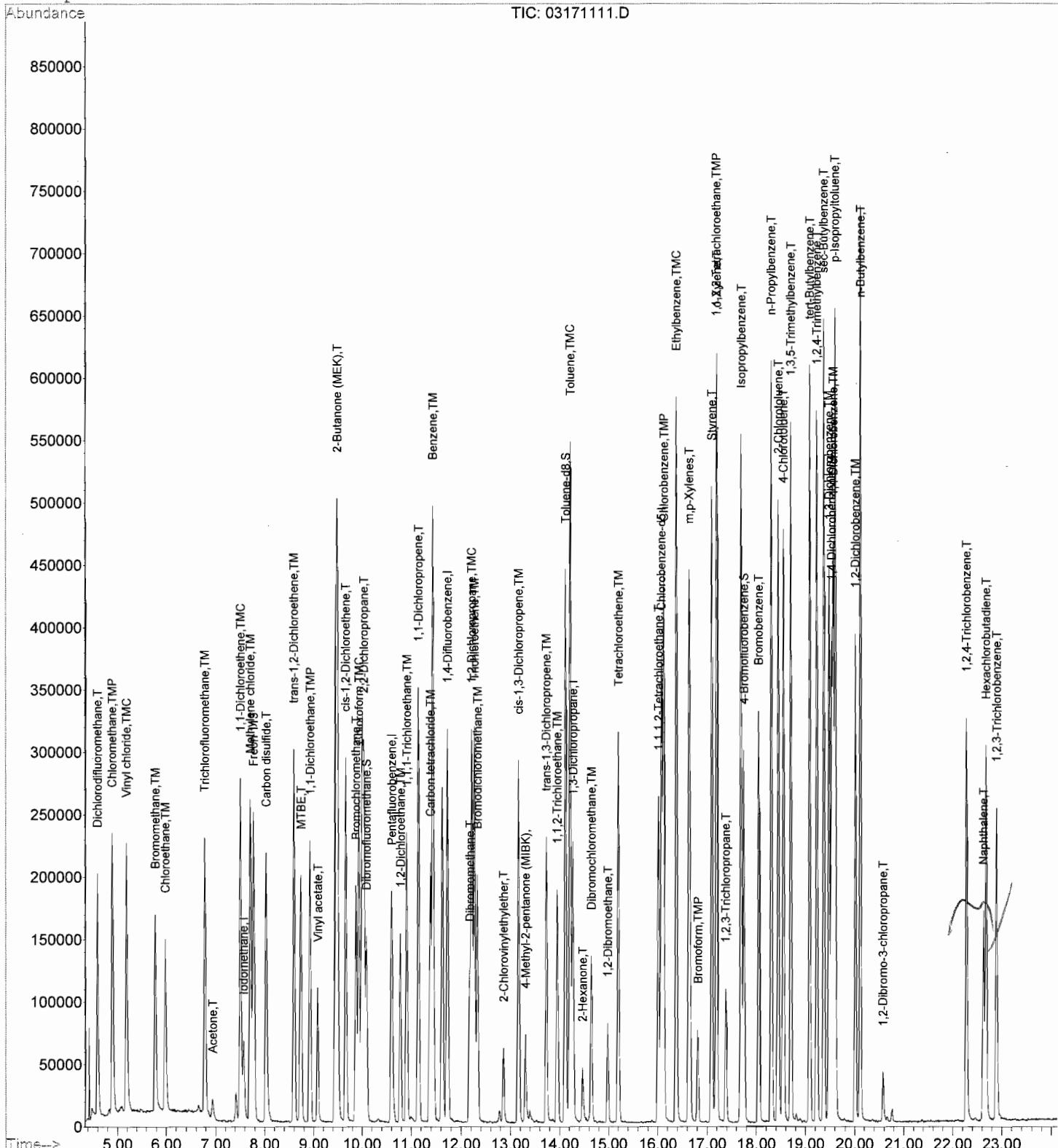
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	23.20	ug/L	# 93
44) Dibromochloromethane	14.64	129	81864	25.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	70424	26.01	ug/L	99
46) Tetrachloroethene	15.21	166	109364	25.16	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	25.31	ug/L	97
48) Chlorobenzene	16.12	112	284407	24.90	ug/L	99
49) Ethylbenzene	16.37	91	538674	25.57	ug/L	99
50) m,p-Xylenes	16.64	106	186494	25.11	ug/L	99
51) Styrene	17.09	104	295005	25.82	ug/L	99
52) o-Xylene	17.19	106	177920	24.79	ug/L	97
55) Bromoform	16.81	173	42372	26.71	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	24.99	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	18834	26.78	ug/L	95
58) Isopropylbenzene	17.69	105	445254	25.36	ug/L	100
59) Bromobenzene	18.05	156	105054	26.51	ug/L	98
60) n-Propylbenzene	18.30	91	632559	25.51	ug/L	99
61) 2-Chlorotoluene	18.44	91	364433	25.52	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.87	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.55	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.26	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.14	ug/L	99
66) sec-Butylbenzene	19.37	105	556785	25.52	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	205642	25.27	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	201942	24.80	ug/L	99
69) p-Isopropyltoluene	19.61	119	434002	25.61	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.97	ug/L	99
71) n-Butylbenzene	20.12	91	487367	26.00	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	26.23	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	122376	25.01	ug/L	99
74) Naphthalene	22.63	128	163821	26.30	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	28.14	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	101564	24.99	ug/L	100

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
Acq On : 17 Mar 2011 11:46 am Operator: LC  
Sample : 25 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	202044	49.12	ug/L	0.00
Spiked Amount 25.000			Recovery	= 196.48%		
39) Toluene-d8	14.11	98	726789	50.32	ug/L	0.00
Spiked Amount 25.000			Recovery	= 201.28%		
53) 4-Bromofluorobenzene	17.76	95	259969	50.54	ug/L	0.00
Spiked Amount 25.000			Recovery	= 202.16%		

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	391099	46.88	ug/L	100
3) Chloromethane	4.90	50	687656	58.35	ug/L	100
4) Vinyl chloride	5.18	62	596978	51.89	ug/L	98
5) Bromomethane	5.78	94	296252	58.13	ug/L	98
6) Chloroethane	5.99	64	300876	48.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	340516	39.53	ug/L	98
8) Acetone	6.93	43	44278	Below Cal		99
9) Iodomethane	7.58	142	195341	48.96	ug/L	99
10) 1,1-Dichloroethene	7.52	96	220268	50.38	ug/L	97
11) Methylene chloride	7.71	84	264019	45.88	ug/L	99
12) Freon 113	7.78	101	262900	47.00	ug/L	99
13) Carbon disulfide	8.03	76	807912	52.24	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.50	ug/L	98
15) MTBE	8.73	73	407385	45.06	ug/L	98
16) 1,1-Dichloroethane	8.92	63	517515	47.09	ug/L	100
17) Vinyl acetate	9.08	43	400997	47.13	ug/L	100
18) 2-Butanone (MEK)	9.47	72	13656	46.83	ug/L	100
19) cis-1,2-Dichloroethene	9.66	96	257331	46.32	ug/L	99
20) Bromochloromethane	9.87	128	96376	46.81	ug/L	98
21) Chloroform	9.93	83	424654	46.74	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.12	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	48.57	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	323769	47.65	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.22	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	49.71	ug/L	100
29) Benzene	11.44	78	1008066	49.11	ug/L	99
30) Dibromomethane	12.17	93	116662	47.65	ug/L	97
31) 1,2-Dichloropropane	12.21	63	281688	49.02	ug/L	99
32) Trichloroethene	12.26	95	255144	49.32	ug/L	98
33) Bromodichloromethane	12.33	83	300337	49.57	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	37.02	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	364674	49.91	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	44.54	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.71	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	47.11	ug/L	97
40) Toluene	14.22	92	583744	50.83	ug/L	100
42) 1,3-Dichloropropane	14.27	76	277506	48.23	ug/L	99

(#) = qualifier out of range (m) = manual integration

03171112.D 031411.M Thu Mar 17 14:02:05 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011 Quant Results File: 031411.RES

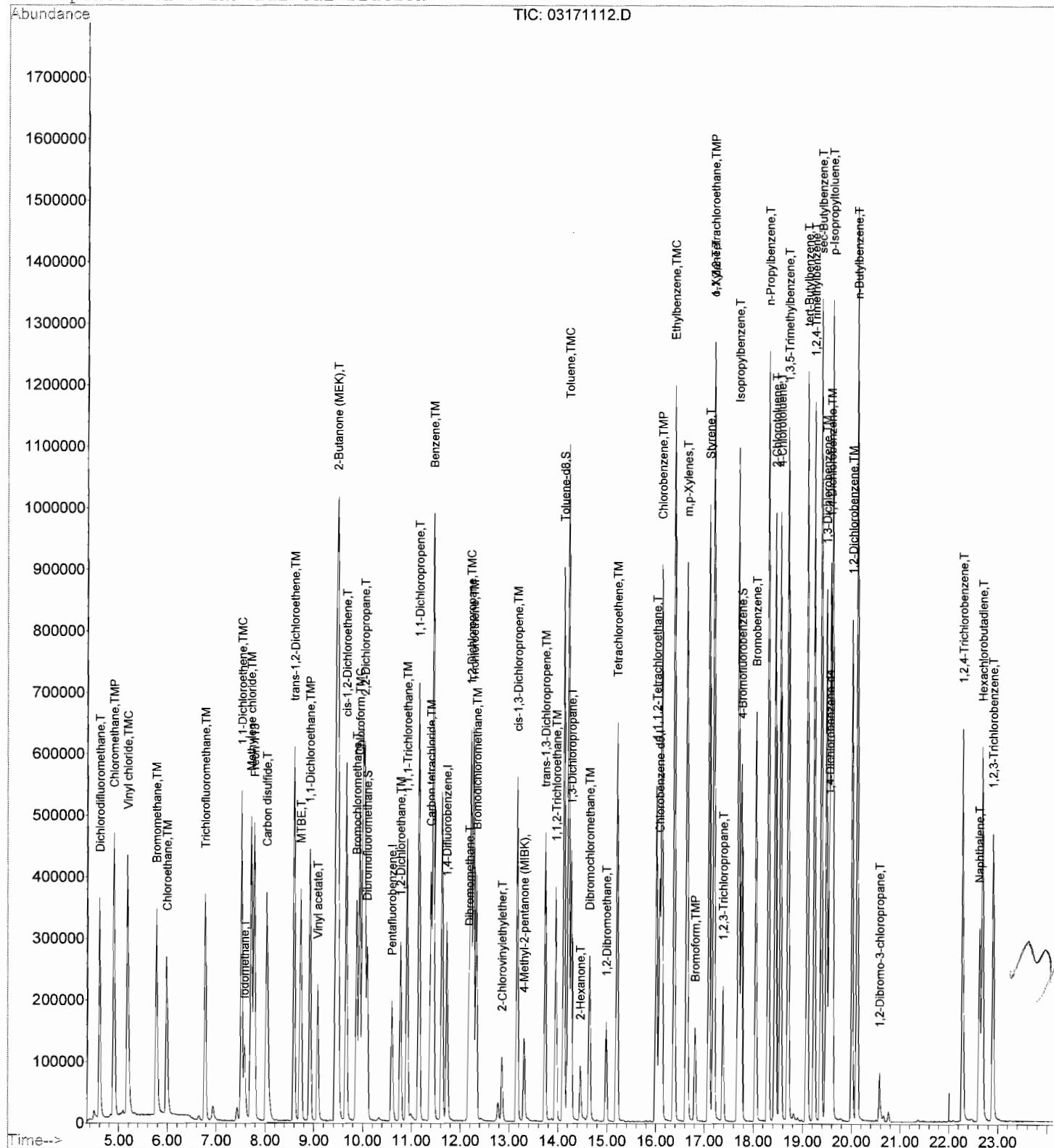
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	48.63	ug/L	# 100
44) Dibromochloromethane	14.65	129	168655	51.01	ug/L	99
45) 1,2-Dibromoethane	14.98	107	142279	50.69	ug/L	99
46) Tetrachloroethene	15.20	166	223148	49.54	ug/L	98
47) 1,1,2-Tetrachloroethane	16.01	131	180404	50.19	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.72	ug/L	99
49) Ethylbenzene	16.38	91	1095906	50.20	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.92	ug/L	97
51) Styrene	17.10	104	602783	50.90	ug/L	100
52) o-Xylene	17.20	106	366193	49.22	ug/L	100
55) Bromoform	16.82	173	87491	53.39	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.00	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	51.09	ug/L	99
58) Isopropylbenzene	17.70	105	904235	49.87	ug/L	99
59) Bromobenzene	18.05	156	210716	51.49	ug/L	98
60) n-Propylbenzene	18.30	91	1279523	49.95	ug/L	99
61) 2-Chlorotoluene	18.45	91	736550	49.95	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.28	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.43	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	49.92	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	772492	49.11	ug/L	98
66) sec-Butylbenzene	19.38	105	1121222	49.75	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	414698	49.34	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	411367	48.92	ug/L	99
69) p-Isopropyltoluene	19.61	119	866615	49.52	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	50.59	ug/L	100
71) n-Butylbenzene	20.11	91	964633	49.82	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	50.62	ug/L	96
73) 1,2,4-Trichlorobenzene	22.28	180	240360	47.56	ug/L	100
74) Naphthalene	22.63	128	314469	48.88	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	53.99	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	192513	45.85	ug/L	100

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	425047	101.93	ug/L	0.00
Spiked Amount 25.000				Recovery =	407.72%	
39) Toluene-d8	14.12	98	1505447	102.12	ug/L	0.00
Spiked Amount 25.000				Recovery =	408.48%	
53) 4-Bromofluorobenzene	17.75	95	536695	104.44	ug/L	0.00
Spiked Amount 25.000				Recovery =	417.76%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	779223	92.13	ug/L	100
3) Chloromethane	4.90	50	1431368	119.80	ug/L	100
4) Vinyl chloride	5.18	62	1228117	105.30	ug/L	100
5) Bromomethane	5.78	94	641424	124.14	ug/L	98
6) Chloroethane	5.98	64	584071	93.50	ug/L	98
7) Trichlorofluoromethane	6.78	101	698452	79.96	ug/L	99
8) Acetone	6.94	43	84316	Below Cal		99
9) Iodomethane	7.58	142	393011	97.15	ug/L	96
10) 1,1-Dichloroethene	7.52	96	450680	101.96	ug/L	97
11) Methylene chloride	7.71	84	530536	90.93	ug/L	100
12) Freon 113	7.78	101	537890	94.84	ug/L	100
13) Carbon disulfide	8.04	76	1652598	105.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.91	ug/L	95
15) MTBE	8.74	73	859812	93.80	ug/L	100
16) 1,1-Dichloroethane	8.93	63	1054794	94.66	ug/L	100
17) Vinyl acetate	9.08	43	827230	95.91	ug/L	100
18) 2-Butanone (MEK)	9.47	72	27904	94.38	ug/L	95
19) cis-1,2-Dichloroethene	9.66	96	527963	93.73	ug/L	99
20) Bromochloromethane	9.87	128	191014	91.51	ug/L	99
21) Chloroform	9.93	83	877382	95.25	ug/L	99
22) 2,2-Dichloropropane	10.04	77	739530	96.19	ug/L	100
24) 1,2-Dichloroethane	10.78	62	540824	99.03	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	659685	95.75	ug/L	98
27) 1,1-Dichloropropene	11.15	75	764611	96.61	ug/L	99
28) Carbon tetrachloride	11.39	117	547122	99.42	ug/L	100
29) Benzene	11.44	78	2051183	97.90	ug/L	100
30) Dibromomethane	12.17	93	236182	94.51	ug/L	98
31) 1,2-Dichloropropane	12.21	63	573859	97.85	ug/L	99
32) Trichloroethene	12.27	95	518186	98.14	ug/L	98
33) Bromodichloromethane	12.33	83	619726	100.21	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	99299	69.01	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	755768	101.34	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	94.02	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	581943	99.90	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	272981	95.51	ug/L	97
40) Toluene	14.22	92	1181672	100.81	ug/L	100
42) 1,3-Dichloropropane	14.27	76	562918	97.92	ug/L	100

(#) = qualifier out of range (m) = manual integration

03171113.D 031411.M Thu Mar 17 14:02:38 2011

M 3/11/11  
VC 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

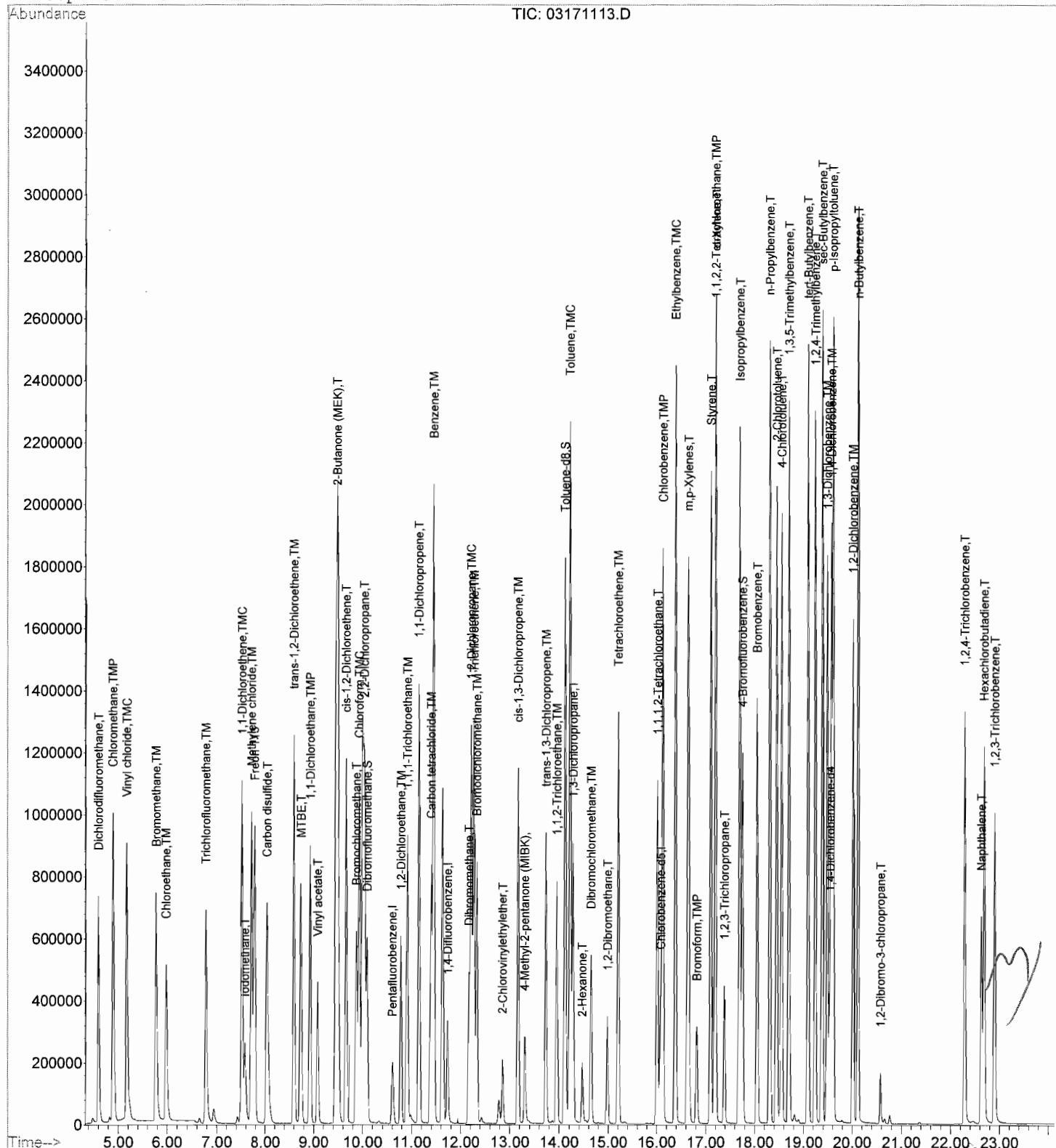
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	102.53	ug/L	# 97
44) Dibromochloromethane	14.65	129	341882	103.49	ug/L	99
45) 1,2-Dibromoethane	14.98	107	294156	104.89	ug/L	100
46) Tetrachloroethene	15.20	166	455622	101.24	ug/L	99
47) 1,1,2-Tetrachloroethane	16.01	131	371997	103.59	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.63	ug/L	99
49) Ethylbenzene	16.38	91	2245318	102.94	ug/L	99
50) m,p-Xylenes	16.64	106	773283	100.56	ug/L	99
51) Styrene	17.10	104	1244691	105.20	ug/L	100
52) o-Xylene	17.20	106	750628	100.99	ug/L	100
55) Bromoform	16.82	173	182147	107.85	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.48	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	75618	101.00	ug/L	99
58) Isopropylbenzene	17.70	105	1844526	98.70	ug/L	100
59) Bromobenzene	18.05	156	429425	101.80	ug/L	99
60) n-Propylbenzene	18.30	91	2615929	99.09	ug/L	100
61) 2-Chlorotoluene	18.45	91	1500663	98.74	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.30	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	99.53	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	98.40	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	97.37	ug/L	98
66) sec-Butylbenzene	19.39	105	2280043	98.16	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	847018	97.78	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.72	ug/L	99
69) p-Isopropyltoluene	19.61	119	1785874	99.02	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	99.76	ug/L	100
71) n-Butylbenzene	20.12	91	1981760	99.31	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	99.91	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	510699	98.06	ug/L	98
74) Naphthalene	22.63	128	678287	102.29	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	110.66	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	412634	95.36	ug/L	99

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	839626	197.42	ug/L	0.00
Spiked Amount 25.000				Recovery =	789.68%	
39) Toluene-d8	14.12	98	3013932	203.78	ug/L	0.00
Spiked Amount 25.000				Recovery =	815.12%	
53) 4-Bromofluorobenzene	17.76	95	1038923	199.04	ug/L	0.00
Spiked Amount 25.000				Recovery =	796.16%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.60	85	1487523	172.44	ug/L 99
3) Chloromethane	4.90	50	2913054	239.06	ug/L 100
4) Vinyl chloride	5.16	62	2428967	204.20	ug/L 99
5) Bromomethane	5.78	94	1343422	254.94	ug/L 99
6) Chloroethane	5.98	64	1199344	188.24	ug/L 98
7) Trichlorofluoromethane	6.79	101	1701514	191.01	ug/L 99
8) Acetone	6.94	43	201529	Below Cal	100
9) Iodomethane	7.58	142	794173	192.50	ug/L 99
10) 1,1-Dichloroethene	7.52	96	920511	204.48	ug/L 96
11) Methylene chloride	7.71	84	1063508	178.73	ug/L 98
12) Freon 113	7.78	101	1079115	186.56	ug/L 99
13) Carbon disulfide	8.03	76	3312605	208.15	ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	1036042	187.33	ug/L 96
15) MTBE	8.74	73	1719756	183.97	ug/L 100
16) 1,1-Dichloroethane	8.93	63	2105414	185.27	ug/L 99
17) Vinyl acetate	9.08	43	1660788	188.79	ug/L 100
18) 2-Butanone (MEK)	9.47	72	57153	189.53	ug/L 87
19) cis-1,2-Dichloroethene	9.66	96	1073476	186.86	ug/L 98
20) Bromochloromethane	9.88	128	361702	169.90	ug/L 98
21) Chloroform	9.93	83	1746080	185.86	ug/L 99
22) 2,2-Dichloropropane	10.04	77	1448285	184.71	ug/L 99
24) 1,2-Dichloroethane	10.78	62	1056987	189.77	ug/L 99
25) 1,1,1-Trichloroethane	10.91	97	1325051	188.58	ug/L 98
27) 1,1-Dichloropropene	11.15	75	1539559	193.90	ug/L 99
28) Carbon tetrachloride	11.39	117	1092097	197.81	ug/L 100
29) Benzene	11.45	78	4061777	193.23	ug/L 100
30) Dibromomethane	12.17	93	461244	183.97	ug/L 99
31) 1,2-Dichloropropane	12.21	63	1126863	191.52	ug/L 99
32) Trichloroethene	12.27	95	1022222	192.97	ug/L 99
33) Bromodichloromethane	12.33	83	1217593	196.24	ug/L 100
34) 2-Chlorovinylethylether	12.86	63	174106	120.61	ug/L 98
35) cis-1,3-Dichloropropene	13.17	75	1495017	199.81	ug/L 100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	183.63	ug/L 99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.49	ug/L 99
38) 1,1,2-Trichloroethane	13.95	83	536251	187.01	ug/L 98
40) Toluene	14.22	92	2368495	201.40	ug/L 100
42) 1,3-Dichloropropane	14.28	76	1107954	189.75	ug/L 100

(#) = qualifier out of range (m) = manual integration

03171114.D 031411.M Thu Mar 17 14:03:08 2011

ML/ML  
2011/03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

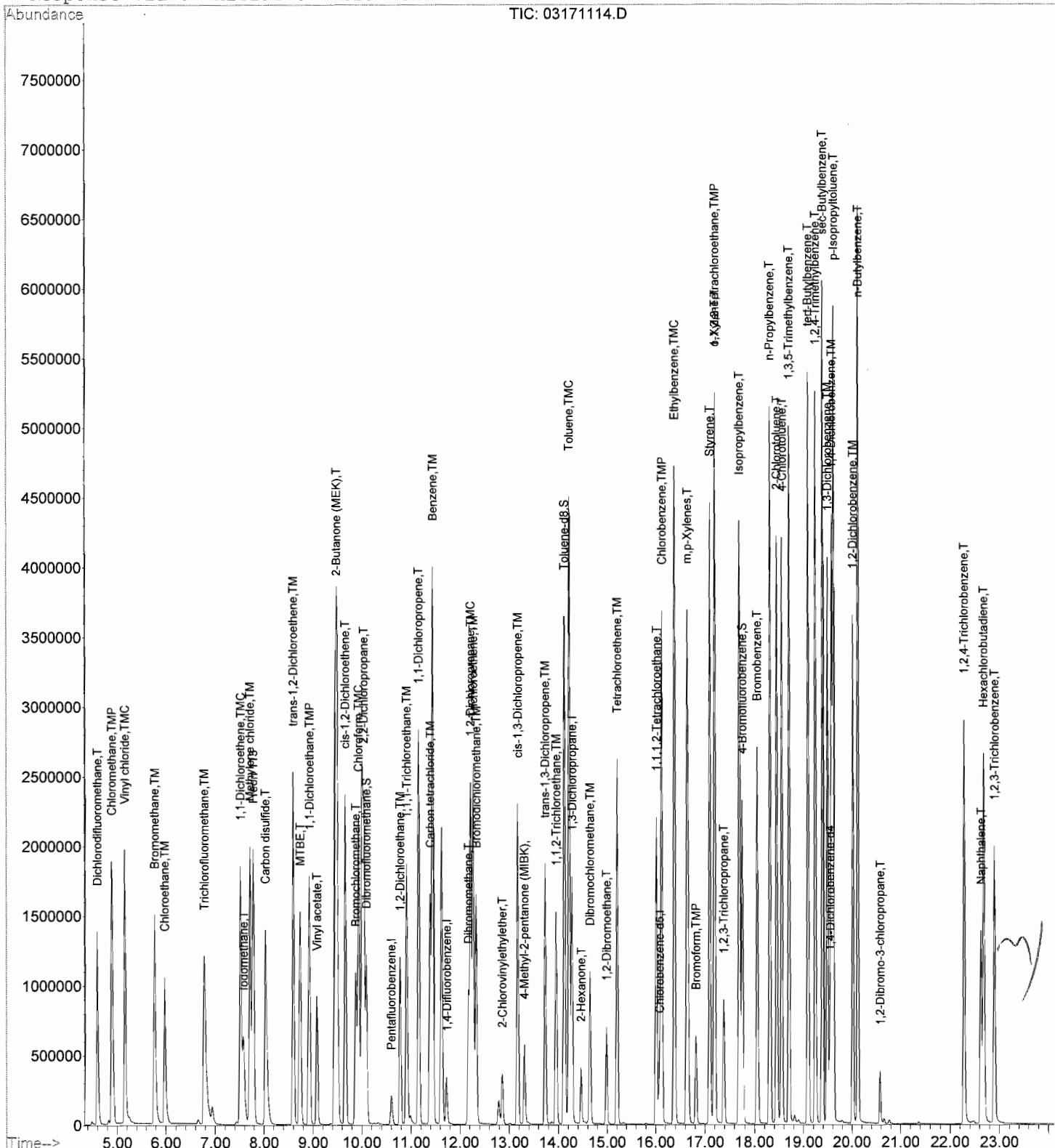
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	196.91	ug/L	# 97
44) Dibromochloromethane	14.65	129	686033	204.44	ug/L	100
45) 1,2-Dibromoethane	14.99	107	575405	202.00	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.99	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	207.25	ug/L	99
48) Chlorobenzene	16.13	112	2393108	199.20	ug/L	97
49) Ethylbenzene	16.38	91	4465000	201.54	ug/L	98
50) m,p-Xylenes	16.64	106	1550944	198.56	ug/L	99
51) Styrene	17.10	104	2561762	213.16	ug/L	99
52) o-Xylene	17.20	106	1517247	200.97	ug/L	100
55) Bromoform	16.82	173	364089	189.30	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.64	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	155202	182.01	ug/L	98
58) Isopropylbenzene	17.70	105	3655213	171.73	ug/L	99
59) Bromobenzene	18.05	156	865850	180.23	ug/L	97
60) n-Propylbenzene	18.31	91	5305462	176.46	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	180.76	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.25	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	192.28	ug/L	99
64) tert-Butylbenzene	19.09	119	2997423	192.66	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	186.05	ug/L	97
66) sec-Butylbenzene	19.39	105	5038432	190.46	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	1885851	191.15	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.79	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	195.79	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	197.15	ug/L	100
71) n-Butylbenzene	20.12	91	4374192	192.47	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	195.71	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	186.75	ug/L	98
74) Naphthalene	22.63	128	1413680	187.19	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	212.10	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	830638	168.55	ug/L	100

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
Acq On : 17 Mar 2011 1:19 pm Operator: LC  
Sample : 200 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## NEW8260-CCV

**Data File Name** 03171115.D  
**Data File Path** C:\HPCHEM\1\GCMS7\DATA\031711\  
**Operator** LC  
**Date Acquired** 3/17/2011 1:50  
**Acq. Method File** 8260B  
**Sample Name** SS  
**Instrument Name** GCMS7

<b>Internal Standard</b>	<b>Target Response</b>	<b>CCV Response</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>
Pentafluorobenzene	204788	164363	82181.5	328726	TRUE
1,4-Difluorobenzene	354603	291205	145602.5	582410	TRUE
Chlorobenzene-d5	296499	242488	121244	484976	TRUE
1,4-Dichlorobenzene-d4	131216	112264	56132	224528	TRUE

<b>Name</b>	<b>Amount</b>	<b>Spike Amount</b>	<b>% REC</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>
Dichlorodifluoromethane	21.34	25.00	85.36	60	150	TRUE
Chloromethane	20.19	25.00	80.77	60	140	TRUE
Vinyl chloride	21.98	25.00	87.90	80	120	TRUE CCC
Bromomethane	21.20	25.00	84.79	70	140	TRUE
Chloroethane	21.91	25.00	87.64	70	130	TRUE
Trichlorofluoromethane	25.44	25.00	101.76	70	150	TRUE
Acetone	32.58	25.00	130.32	10	150	TRUE
Iodomethane	30.91	25.00	123.66	70	140	TRUE
1,1-Dichloroethene	24.98	25.00	99.91	80	120	TRUE CCC
Methylene chloride	24.09	25.00	96.37	70	120	TRUE
Freon 113	24.00	25.00	95.98	60	140	TRUE
Carbon disulfide	25.08	25.00	100.31	70	130	TRUE
trans-1,2-Dichloroethene	21.70	25.00	86.79	80	120	TRUE
MTBE	20.73	25.00	82.90	70	130	TRUE
1,1-Dichloroethane	20.79	25.00	83.16	70	125	TRUE
Vinyl acetate	26.90	25.00	107.60	40	150	TRUE
2-Butanone (MEK)	24.92	25.00	99.67	40	150	TRUE
cis-1,2-Dichloroethene	20.20	25.00	80.78	80	120	TRUE
Bromochloromethane	21.09	25.00	84.35	80	120	TRUE
Chloroform	20.32	25.00	81.28	80	120	TRUE CCC
2,2-Dichloropropane	21.15	25.00	84.60	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>21.57</b>	<b>25.00</b>	<b>86.27</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	20.57	25.00	82.26	75	130	TRUE
1,1,1-Trichloroethane	21.81	25.00	87.23	80	120	TRUE
1,1-Dichloropropene	22.05	25.00	88.19	80	120	TRUE
Carbon tetrachloride	22.49	25.00	89.96	80	130	TRUE
Benzene	21.24	25.00	84.94	80	120	TRUE
Dibromomethane	22.05	25.00	88.19	80	120	TRUE
1,2-Dichloropropane	21.44	25.00	85.74	80	120	TRUE CCC
Trichloroethene	21.49	25.00	85.98	80	120	TRUE
Bromodichloromethane	21.49	25.00	85.95	80	120	TRUE
2-Chlorovinyletherether	33.03	25.00	132.10	70	135	TRUE
cis-1,3-Dichloropropene	21.67	25.00	86.67	80	120	TRUE
4-Methyl-2-pentanone (MIB)	23.62	25.00	94.48	60	130	TRUE
trans-1,3-Dichloropropene	22.74	25.00	90.94	80	125	TRUE

1,1,2-Trichloroethane	22.20	25.00	88.81	80	120	TRUE
Toluene-d8	<b>21.91</b>	<b>25.00</b>	<b>87.66</b>	<b>80</b>	<b>120</b>	TRUE
Toluene	21.78	25.00	87.14	80	120	TRUE CCC
1,3-Dichloropropane	21.05	25.00	84.20	80	120	TRUE
2-Hexanone	25.08	25.00	100.33	20	150	TRUE
Dibromochloromethane	21.71	25.00	86.84	80	120	TRUE
1,2-Dibromoethane	22.31	25.00	89.25	80	120	TRUE
Tetrachloroethene	22.09	25.00	88.37	70	130	TRUE
1,1,1,2-Tetrachloroethane	21.46	25.00	85.82	80	120	TRUE
Chlorobenzene	21.76	25.00	87.05	80	120	TRUE
Ethylbenzene	21.51	25.00	86.06	80	120	TRUE CCC
m,p-Xylenes	21.31	25.00	85.25	60	140	TRUE
Styrene	23.00	25.00	92.00	80	120	TRUE
o-Xylene	20.70	25.00	82.81	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>20.94</b>	<b>25.00</b>	<b>83.76</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	24.45	25.00	97.79	80	120	TRUE
1,1,2,2-Tetrachloroethane	23.28	25.00	93.12	80	120	TRUE
1,2,3-Trichloropropane	23.38	25.00	93.50	70	130	TRUE
Isopropylbenzene	25.73	25.00	102.90	80	130	TRUE
Bromobenzene	24.00	25.00	96.00	80	120	TRUE
n-Propylbenzene	24.01	25.00	96.04	75	130	TRUE
2-Chlorotoluene	22.31	25.00	89.23	80	120	TRUE
4-Chlorotoluene	23.19	25.00	92.75	80	120	TRUE
1,3,5-Trimethylbenzene	23.39	25.00	93.56	80	130	TRUE
tert-Butylbenzene	23.30	25.00	93.19	80	120	TRUE
1,2,4-Trimethylbenzene	23.52	25.00	94.06	80	120	TRUE
sec-Butylbenzene	22.94	25.00	91.76	80	125	TRUE
1,3-Dichlorobenzene	22.83	25.00	91.30	80	120	TRUE
1,4-Dichlorobenzene	22.81	25.00	91.26	80	120	TRUE
p-Isopropyltoluene	23.58	25.00	94.31	80	130	TRUE
1,2-Dichlorobenzene	22.83	25.00	91.31	80	120	TRUE
n-Butylbenzene	23.80	25.00	95.22	80	130	TRUE
1,2-Dibromo-3-chloropropane	24.52	25.00	98.10	50	150	TRUE
1,2,4-Trichlorobenzene	25.88	25.00	103.53	50	150	TRUE
Naphthalene	30.38	25.00	121.52	40	150	TRUE
Hexachlorobutadiene	24.16	25.00	96.62	40	150	TRUE
1,2,3-Trichlorobenzene	25.60	25.00	102.42	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
--------------------	------	------	----------	------	-------	----------

1) Pentafluorobenzene	10.61	168	204788	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	354603	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	296499	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131216	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.10	113	111142	21.57	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.28%	
39) Toluene-d8	14.12	98	391936	21.91	ug/L	0.00
Spiked Amount 25.000			Recovery	=	87.64%	
53) 4-Bromofluorobenzene	17.75	95	136070	20.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	83.76%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.61	85	206452	21.34	ug/L	99
3) Chloromethane	4.90	50	322987	20.19	ug/L	98
4) Vinyl chloride	5.19	62	312968	21.98	ug/L	100
5) Bromomethane	5.78	94	156914	21.20	ug/L	98
6) Chloroethane	5.99	64	165417	21.91	ug/L	99
7) Trichlorofluoromethane	6.79	101	251907	25.44	ug/L	99
8) Acetone	6.94	43	38773	32.58	ug/L	98
9) Iodomethane	7.58	142	141683	30.91	ug/L	98
10) 1,1-Dichloroethene	7.52	96	144273	24.98	ug/L	98
11) Methylene chloride	7.72	84	163712	24.09	ug/L	99
12) Freon 113	7.78	101	164091	24.00	ug/L	99
13) Carbon disulfide	8.04	76	515335	25.08	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	138660	21.70	ug/L	94
15) MTBE	8.75	73	226347	20.73	ug/L	99
16) 1,1-Dichloroethane	8.92	63	277166	20.79	ug/L	99
17) Vinyl acetate	9.08	43	278544	26.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7971	24.92	ug/L	55
19) cis-1,2-Dichloroethene	9.67	96	133655	20.20	ug/L	99
20) Bromochloromethane	9.88	128	51073	21.09	ug/L	97
21) Chloroform	9.94	83	223530	20.32	ug/L	99
22) 2,2-Dichloropropane	10.04	77	188645	21.15	ug/L	97
24) 1,2-Dichloroethane	10.78	62	138066	20.57	ug/L	100
25) 1,1,1-Trichloroethane	10.92	97	172274	21.81	ug/L	97
27) 1,1-Dichloropropene	11.15	75	200126	22.05	ug/L	99
28) Carbon tetrachloride	11.39	117	140957	22.49	ug/L	99
29) Benzene	11.44	78	515367	21.24	ug/L	100
30) Dibromomethane	12.18	93	63306	22.05	ug/L	98
31) 1,2-Dichloropropane	12.22	63	145297	21.44	ug/L	100
32) Trichloroethene	12.27	95	130435	21.49	ug/L	100
33) Bromodichloromethane	12.34	83	153079	21.49	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	40803	33.03	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	187370	21.67	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	83668	23.62	ug/L	99
37) trans-1,3-Dichloropropene	13.74	75	151736	22.74	ug/L	100
38) 1,1,2-Trichloroethane	13.96	83	71241	22.20	ug/L	98
40) Toluene	14.22	92	300558	21.78	ug/L	97
42) 1,3-Dichloropropane	14.27	76	141234	21.05	ug/L	96

(#= qualifier out of range (m)= manual integration

03171115.D 031711.M Thu Mar 17 14:48:24 2011

✓ 03/16/11  
 ✓ 03/16/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

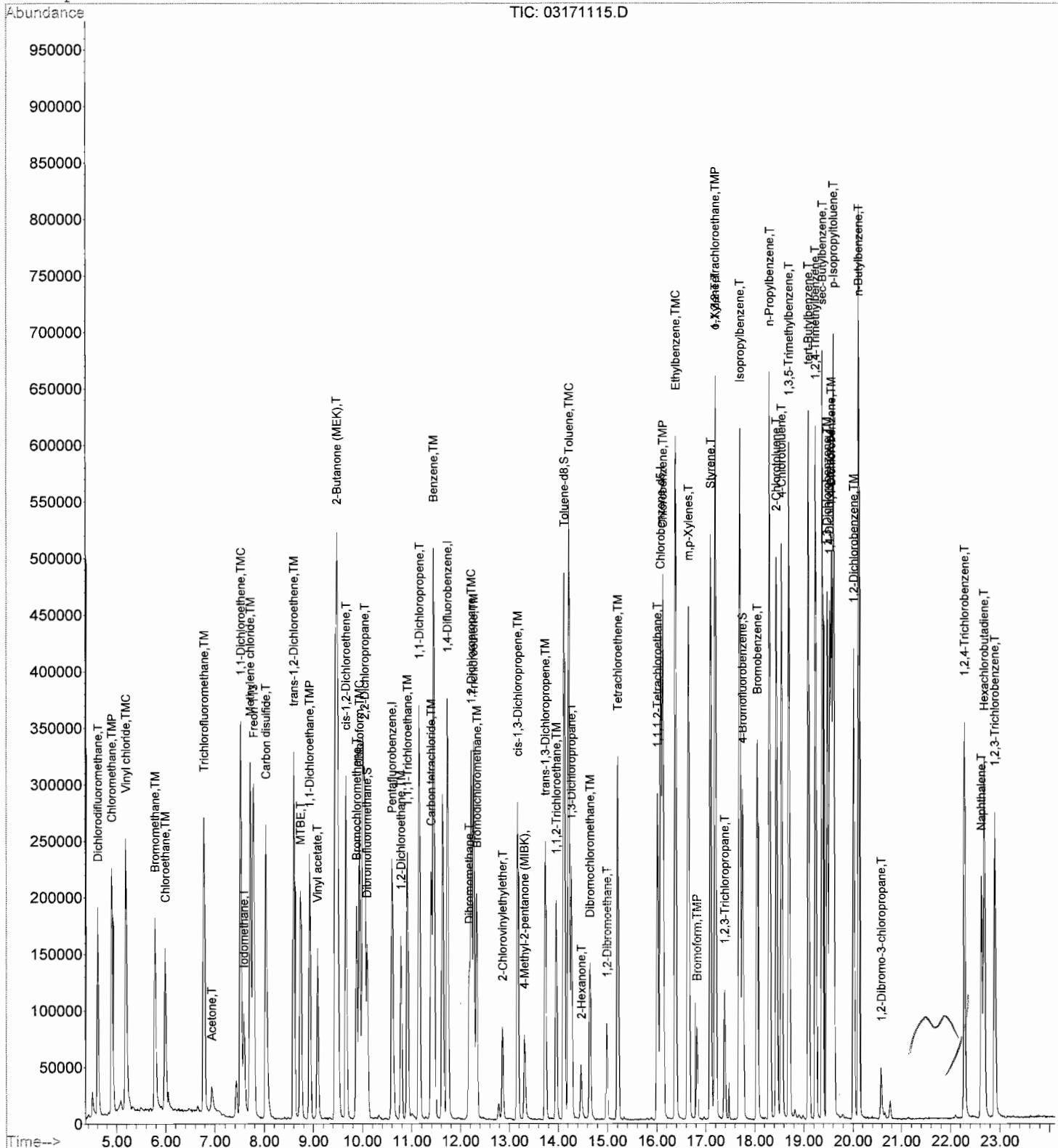
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	56108	25.08	ug/L	# 94
44) Dibromochloromethane	14.65	129	87587	21.71	ug/L	95
45) 1,2-Dibromoethane	14.99	107	75157	22.31	ug/L	99
46) Tetrachloroethene	15.21	166	117481	22.09	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	94210	21.46	ug/L	97
48) Chlorobenzene	16.12	112	303242	21.76	ug/L	99
49) Ethylbenzene	16.38	91	564816	21.51	ug/L	100
50) m,p-Xylenes	16.65	106	195974	21.31	ug/L	98
51) Styrene	17.10	104	320734	23.00	ug/L	98
52) o-Xylene	17.19	106	185035	20.70	ug/L	99
55) Bromoform	16.81	173	46447	24.45	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.19	83	89438	23.28	ug/L	100
57) 1,2,3-Trichloropropane	17.39	110	19539	23.38	ug/L	94
58) Isopropylbenzene	17.70	105	516912	25.73	ug/L	100
59) Bromobenzene	18.06	156	111249	24.00	ug/L	99
60) n-Propylbenzene	18.31	91	688724	24.01	ug/L	100
61) 2-Chlorotoluene	18.45	91	374880	22.31	ug/L	100
62) 4-Chlorotoluene	18.55	91	386272	23.19	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	406096	23.39	ug/L	100
64) tert-Butylbenzene	19.10	119	344368	23.30	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	410391	23.52	ug/L	99
66) sec-Butylbenzene	19.38	105	581187	22.94	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	215599	22.83	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	216972	22.81	ug/L	99
69) p-Isopropyltoluene	19.61	119	456572	23.58	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	187538	22.83	ug/L	99
71) n-Butylbenzene	20.12	91	513084	23.80	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	12556	24.52	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	137336	25.88	ug/L	99
74) Naphthalene	22.63	128	213772	30.38	ug/L	100
75) Hexachlorobutadiene	22.69	225	81857	24.16	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	110762	25.60	ug/L	99

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



# 8260AZ - Vapor Analysis

## 1 PPMV Tertiary Standard

3/17/2011

\* Compound not in the standard mix

ppmv	Mol Wt.	ug/L
1	260.76	10.80

Conversion Calculation: ug/L=ppmv (MW\*P)/(R\*T)

R=Gas Constant(0.08206 l\*atm/(mol\*K)) MW=Molecular Weight

T=Temp in Degree K (21+273.15) P=Pressure in atm

Assume Temp in C of 21 (70 degrees F)

Compound	Molecular Weight	Expected Value (ug/L)	Actual Value (ug/L)	% Recovery
Dichlorodifluoromethane	120.91	5.01	6.05	121
Chloromethane	50.49	2.09	2.13	102
Vinyl Chloride	62.5	2.59	2.49	96
Bromomethane	94.94	3.93	1.91	49
Chloroethane	64.52	2.67	2.56	96
Trichlorofluoromethane	137.37	5.69	5.99	105
Acetone *				
Iodomethane *				
1,1-Dichloroethene	96.94	4.02	3.55	88
Methylene Chloride	84.93	3.52	3.35	95
Carbon Disulfide *				
trans-1,2-DCE *				
MTBE *				
1,1-Dichloroethane	98.96	4.10	3.37	82
Vinyl Acetate *				
2-Butanone *				
cis-1,2-DCE	96.94	4.02	3.41	85
Bromochloromethane *				
Chloroform	119.38	4.95	3.92	79
2,2-Dichloropropane *				
1,2-DCA	98.96	4.10	3.33	81
1,1,1-Trichloroethane	133.41	5.53	4.69	85
1,1-Dichloropropene *				
Carbon Tetrachloride	153.82	6.37	5.34	84
Benzene	78.11	3.24	2.68	83
Dibromomethane *				
1,2-Dichloropropane	112.99	4.68	3.9	83
Trichloroethene	131.39	5.44	4.59	84
Bromodichloromethane *				
2-CEVE *				
cis-1,3-Dichloropropene	110.97	4.60	3.55	77
4-Methyl-2-Pentanone *				
trans-1,3-Dichloropropene	110.97	4.60	3.53	77
1,1,2-Trichloroethane	133.41	5.53	4.56	82
Toluene	92.14	3.82	3.16	83
1,3-Dichloropropane *				

2003/03/18/11  
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2-Hexanone *				
Dibromochloromethane *				
<b>1,2-Dibromoethane</b>	<b>187.86</b>	<b>7.78</b>	<b>6.53</b>	<b>84</b>
<b>Tetrachloroethene</b>	<b>165.83</b>	<b>6.87</b>	<b>5.59</b>	<b>81</b>
1,1,1,2-Tetrachloroethane *				
<b>Chlorobenzene</b>	<b>112.56</b>	<b>4.66</b>	<b>3.59</b>	<b>77</b>
<b>Ethylbenzene</b>	<b>106.16</b>	<b>4.40</b>	<b>3.45</b>	<b>78</b>
<b>m,p-Xylenes</b>	<b>212.36</b>	<b>8.80</b>	<b>6.85</b>	<b>78</b>
<b>Styrene</b>	<b>104.16</b>	<b>4.31</b>	<b>3.37</b>	<b>78</b>
<b>o-Xylene</b>	<b>106.18</b>	<b>4.40</b>	<b>3.51</b>	<b>80</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>133.41</b>	<b>5.53</b>	<b>5.91</b>	<b>107</b>
1,2,3-Trichloropropane *				
Isopropylbenzene *				
Bromobenzene *				
n-Propylbenzene *				
2-Chlorotoluene *				
4-Chlorotoluene *				
<b>1,3,5-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.09</b>	<b>82</b>
tert-butylbenzene *				
<b>1,2,4-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.11</b>	<b>83</b>
sec-butylbenzene *				
<b>1,3-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.85</b>	<b>80</b>
<b>1,4-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.73</b>	<b>78</b>
p-Isopropyltoluene *				
<b>1,2-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>5.01</b>	<b>82</b>
n-Butylbenzene *				
1,2-Dibromo-3-chloropropane *				
<b>1,2,4-Trichlorobenzene</b>	<b>181.46</b>	<b>7.52</b>	<b>5.44</b>	<b>72</b>
Naphthalene *				
<b>Hexachlorobutadiene</b>	<b>260.76</b>	<b>10.80</b>	<b>8.7</b>	<b>81</b>
1,2,3-Trichlorobenzene *				

✓

V

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	201057	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.74	114	351105	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	292717	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	134120	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.10	113	108706	21.49	ug/L	0.00
Spiked Amount 25.000			Recovery	=	85.96%	
39) Toluene-d8	14.12	98	384321	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.80%	
53) 4-Bromofluorobenzene	17.76	95	132578	20.67	ug/L	0.00
Spiked Amount 25.000			Recovery	=	82.68%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.60	85	57530	6.06 ug/L 95
3) Chloromethane	4.90	50	33468	2.13 ug/L 98
4) Vinyl chloride	5.19	62	34821	2.49 ug/L <i>#</i> 96
5) Bromomethane	5.78	94	12125	1.91 ug/L <i>#</i> 94
6) Chloroethane	5.99	64	18973	2.56 ug/L 90
7) Trichlorofluoromethane	6.79	101	58222	5.99 ug/L 100
8) Acetone	6.94	43	1602	Below Cal # 85
9) Iodomethane	7.57	142	6053	1.47 ug/L 91
10) 1,1-Dichloroethene	7.52	96	20124	3.55 ug/L 97
11) Methylene chloride	7.72	84	22344	3.35 ug/L 90
12) Freon 113	7.78	101	41757	6.22 ug/L 97
13) Carbon disulfide	8.03	76	10613	0.53 ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	558	0.09 ug/L # 60
15) MTBE	8.75	73	153	0.01 ug/L # 50
16) 1,1-Dichloroethane	8.93	63	44110	3.37 ug/L 99
17) Vinyl acetate	9.09	43	405	0.04 ug/L # 83
18) 2-Butanone (MEK)	9.66	72	117	1.25 ug/L # 1
19) cis-1,2-Dichloroethene	9.67	96	22148	3.41 ug/L 96
20) Bromochloromethane	0.00	128	0	N.D.
21) Chloroform	9.94	83	42350	3.92 ug/L 98
22) 2,2-Dichloropropane	0.00	77	0	N.D.
24) 1,2-Dichloroethane	10.78	62	21923	3.33 ug/L 96
25) 1,1,1-Trichloroethane	10.92	97	36411	4.69 ug/L 98
27) 1,1-Dichloropropene	0.00	75	0	N.D.
28) Carbon tetrachloride	11.40	117	33155	5.34 ug/L 97
29) Benzene	11.45	78	64449	2.68 ug/L 98
30) Dibromomethane	0.00	93	0	N.D.
31) 1,2-Dichloropropane	12.22	63	26155	3.90 ug/L 99
32) Trichloroethene	12.28	95	27561	4.59 ug/L 97
33) Bromodichloromethane	12.29	83	154	0.02 ug/L # 25
34) 2-Chlorovinylethylether	0.00	63	0	N.D.
35) cis-1,3-Dichloropropene	13.17	75	30363	3.55 ug/L 99
36) 4-Methyl-2-pentanone (MIBK)	13.33	43	274	0.08 ug/L # 50
37) trans-1,3-Dichloropropene	13.74	75	23347	3.53 ug/L 98
38) 1,1,2-Trichloroethane	13.96	83	14497	4.56 ug/L 99
40) Toluene	14.22	92	43103	3.16 ug/L 96
42) 1,3-Dichloropropane	14.21	76	285	0.04 ug/L # 44

(#) = qualifier out of range (m) = manual integration

03171116.D 031711.M Thu Mar 17 14:49:25 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

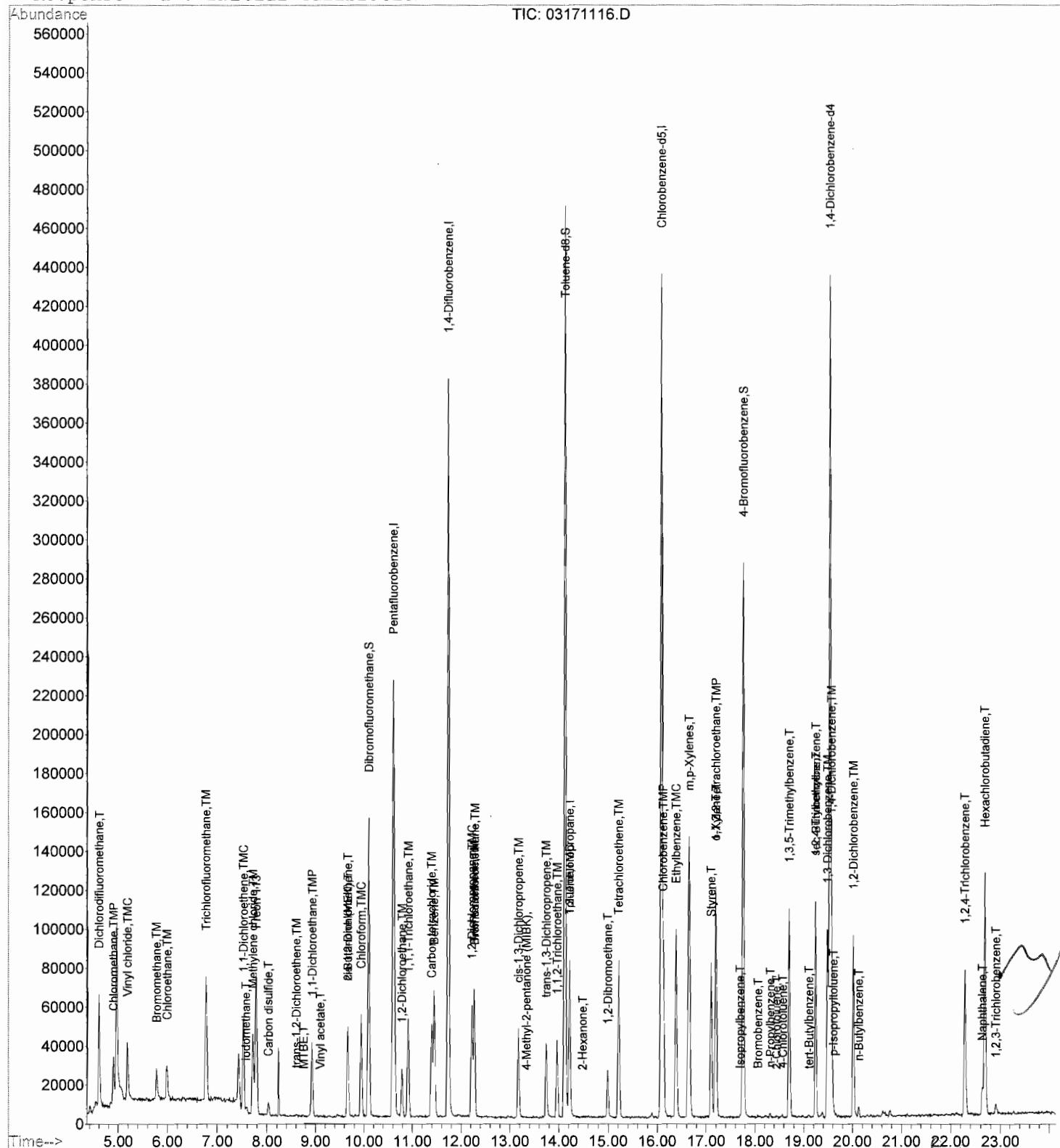
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	136	0.06	ug/L #	29
44) Dibromochloromethane	0.00	129	0	N.D.		
45) 1,2-Dibromoethane	14.99	107	21706	6.53	ug/L	99
46) Tetrachloroethene	15.21	166	29329	5.59	ug/L	99
47) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
48) Chlorobenzene	16.12	112	49412	3.59	ug/L	98
49) Ethylbenzene	16.38	91	89509	3.45	ug/L	99
50) m,p-Xylenes	16.64	106	62191	6.85	ug/L	100
51) Styrene	17.10	104	46398	3.37	ug/L	97
52) o-Xylene	17.19	106	30948	3.51	ug/L	97
55) Bromoform	0.00	173	0	N.D.		
56) 1,1,2,2-Tetrachloroethane	17.19	83	23190	5.91	ug/L	95
57) 1,2,3-Trichloropropane	0.00	110	0	N.D.		
58) Isopropylbenzene	17.70	105	1070	0.05	ug/L #	51
59) Bromobenzene	18.06	156	141	0.03	ug/L #	43
60) n-Propylbenzene	18.32	91	1826	0.06	ug/L #	90
61) 2-Chlorotoluene	18.45	91	787	0.05	ug/L #	44
62) 4-Chlorotoluene	18.56	91	1213	0.07	ug/L #	65
63) 1,3,5-Trimethylbenzene	18.71	105	72087	4.06	ug/L	98
64) tert-Butylbenzene	19.09	119	908	0.06	ug/L #	76
65) 1,2,4-Trimethylbenzene	19.24	105	73403	4.11	ug/L	99
66) sec-Butylbenzene	19.24	105	73403	2.83	ug/L #	61
67) 1,3-Dichlorobenzene	19.49	146	46821	4.85	ug/L	100
68) 1,4-Dichlorobenzene	19.58	146	46004	4.73	ug/L	97
69) p-Isopropyltoluene	19.62	119	1222	0.06	ug/L #	89
70) 1,2-Dichlorobenzene	20.02	146	42108	5.01	ug/L	98
71) n-Butylbenzene	20.13	91	3423	0.16	ug/L	97
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.		
73) 1,2,4-Trichlorobenzene	22.29	180	29509	5.44	ug/L	99
74) Naphthalene	22.63	128	15881	2.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	30129	8.70	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	2346	0.53	ug/L	95



Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	110687	22.71	ug/L	0.00
Spiked Amount 25.000			Recovery	=	90.84%	
39) Toluene-d8	14.11	98	374753	21.71	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.84%	
53) 4-Bromofluorobenzene	17.75	95	131653	21.33	ug/L	0.00
Spiked Amount 25.000			Recovery	=	85.32%	

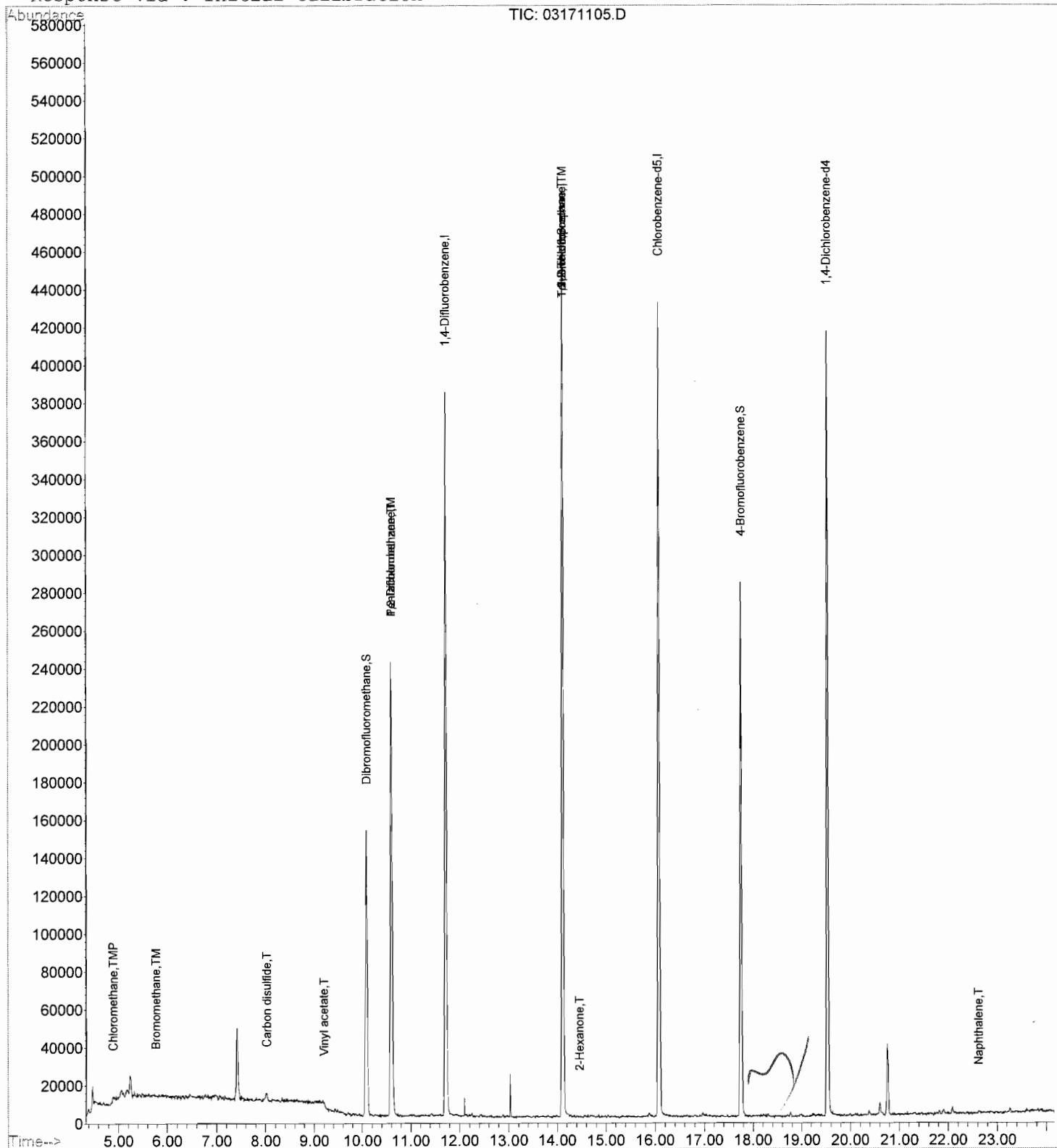
## Target Compounds

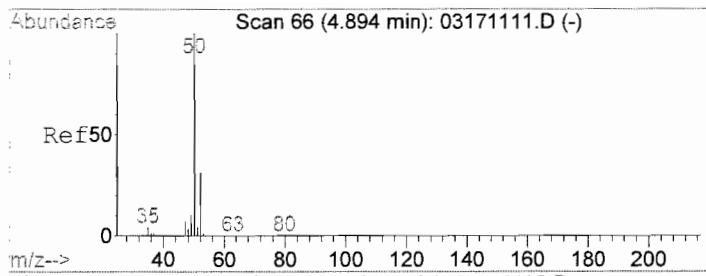
				Qvalue	
3) Chloromethane	4.89	50	1791	0.12 ug/L	LPL 98
5) Bromomethane	5.77	94	123	0.28 ug/L	# 76
8) Acetone	6.93	43	3328	Below Cal	# 67
13) Carbon disulfide	8.02	76	5282	0.27 ug/L	100
17) Vinyl acetate	9.19	43	944	0.10 ug/L	# 83
24) 1,2-Dichloroethane	10.60	62	1206	0.19 ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11 ug/L	# 1
42) 1,3-Dichloropropane	14.12	76	3863	0.61 ug/L	# M21 68
43) 2-Hexanone	14.46	43	235	0.11 ug/L	# LPL 29
74) Naphthalene	22.63	128	1667	0.24 ug/L	100

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
Acq On : 17 Mar 2011 8:41 am Operator: LC  
Sample : BLANK Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

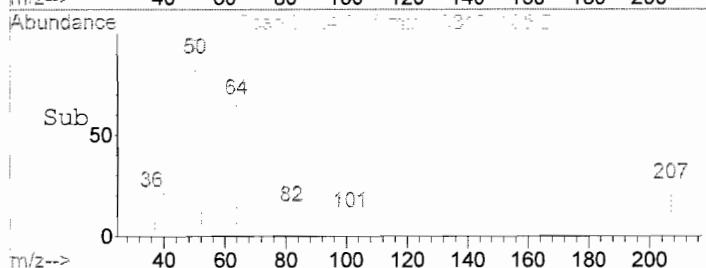
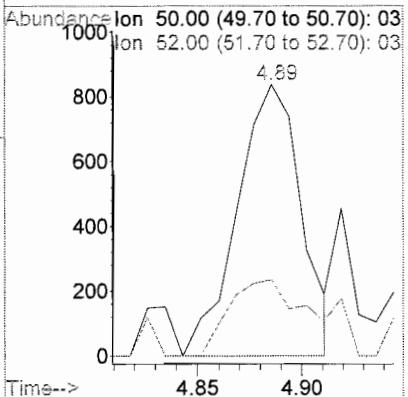
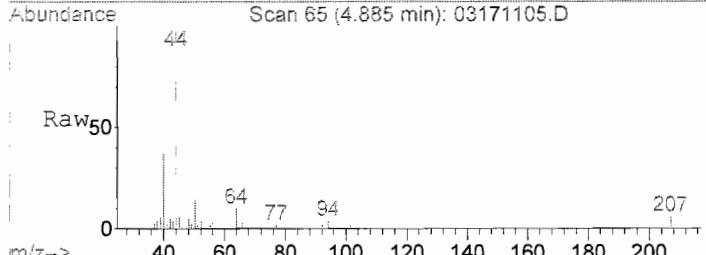
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration





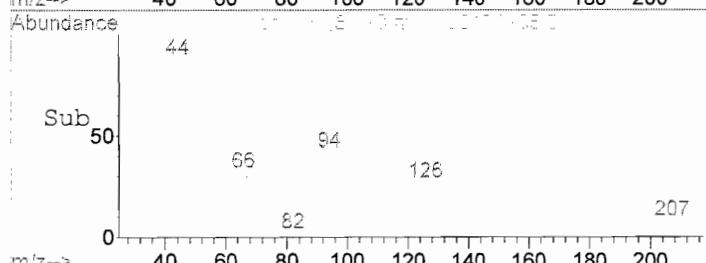
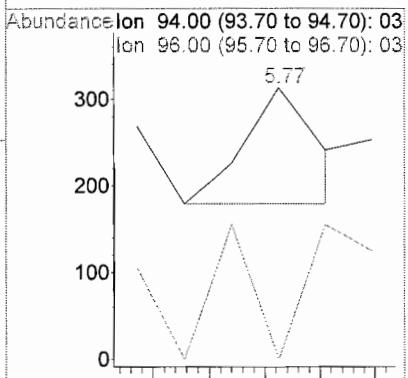
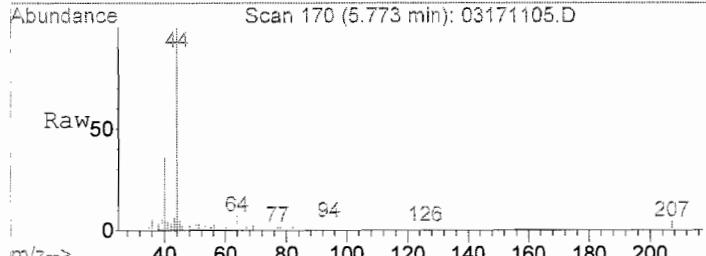
#3  
Chloromethane  
Concen: 0.12 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

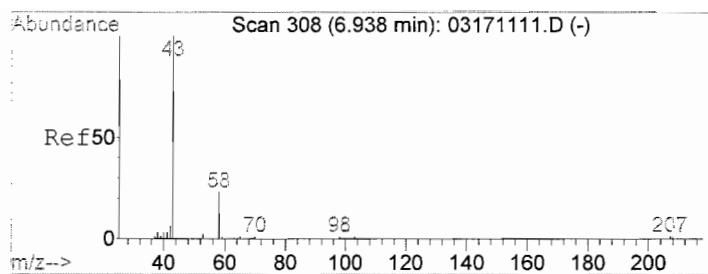
Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.1 37.7



#5  
Bromomethane  
Concen: 0.28 ug/L  
RT: 5.77 min Scan# 170  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

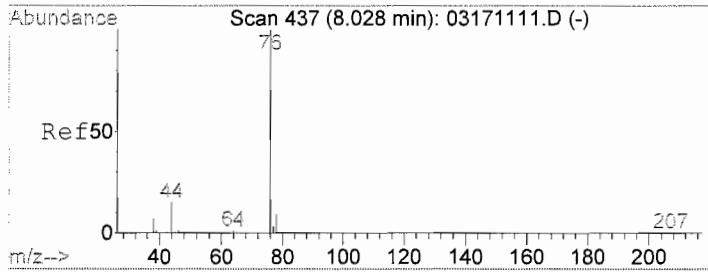
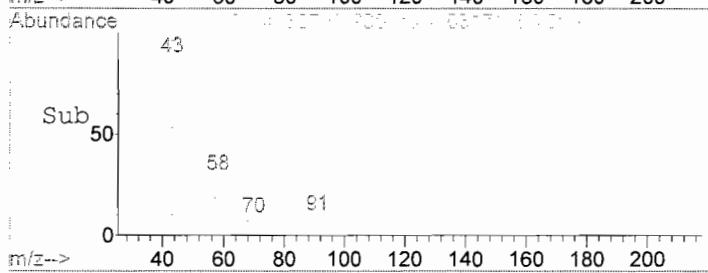
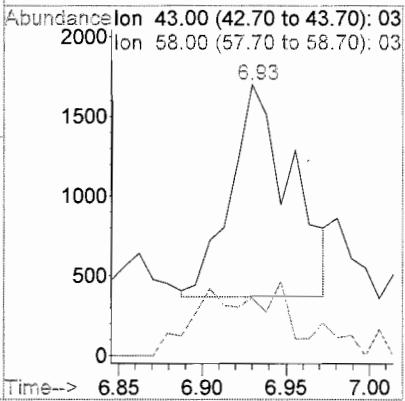
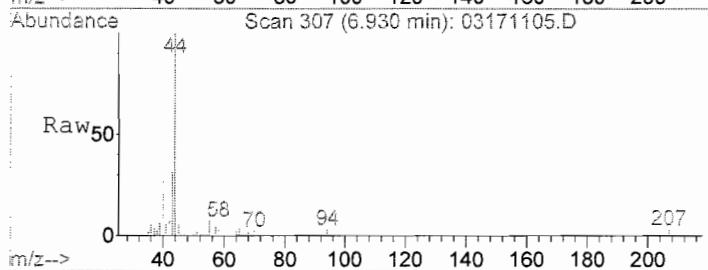
Tgt Ion: 94 Resp: 123  
Ion Ratio Lower Upper  
94 100  
96 115.4 74.0 111.0#





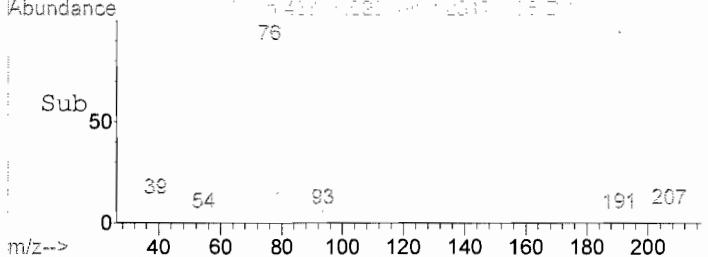
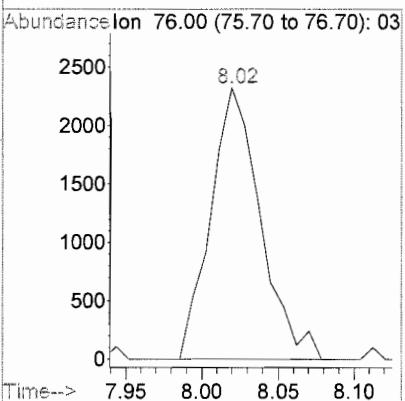
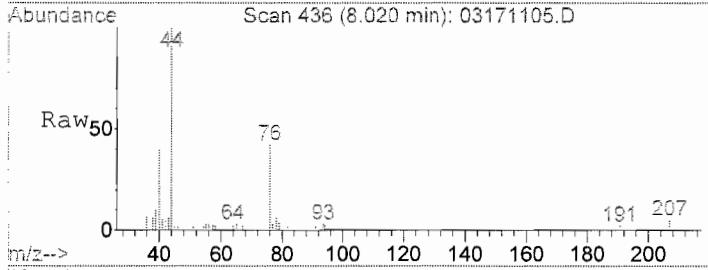
#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 307  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

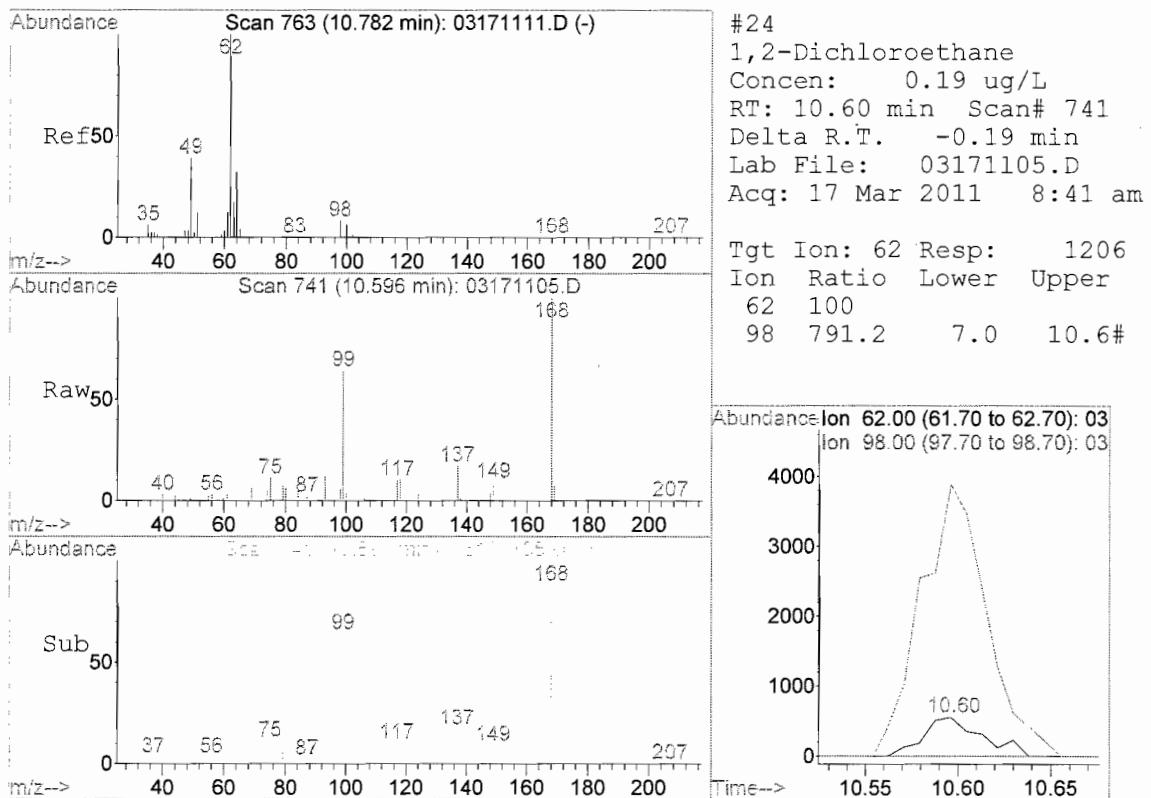
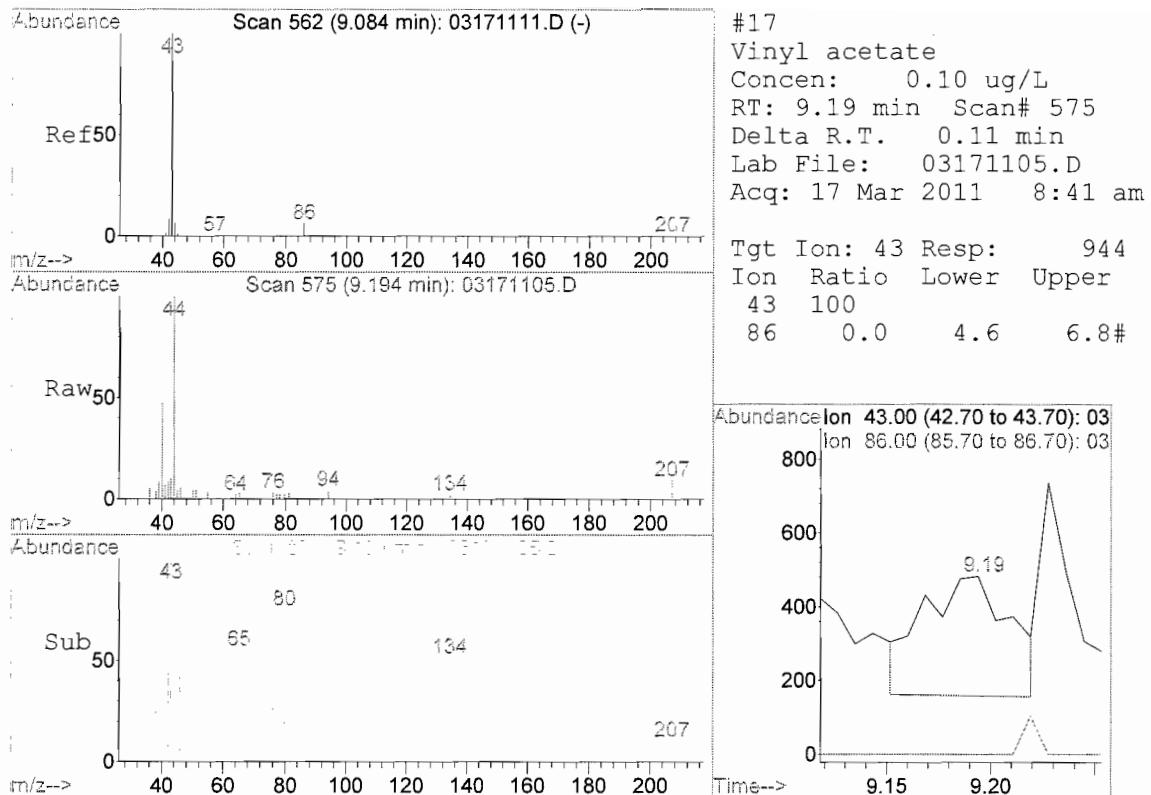
Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 21.2 31.8#



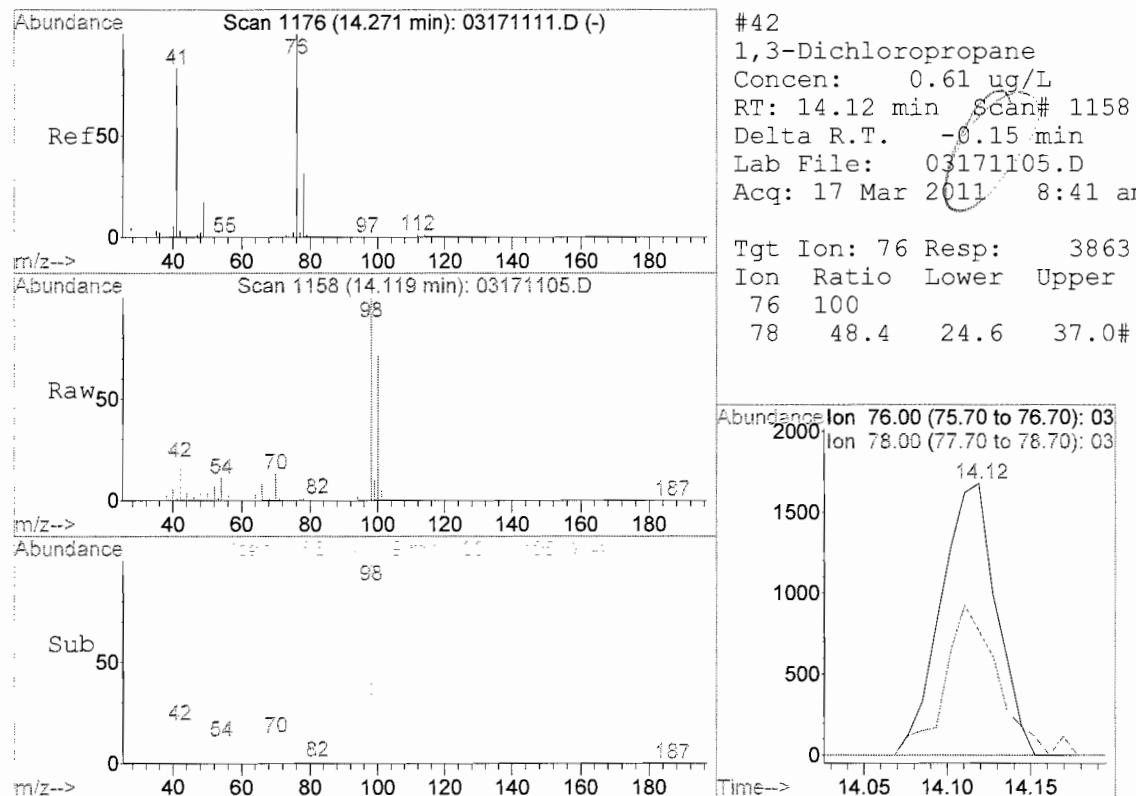
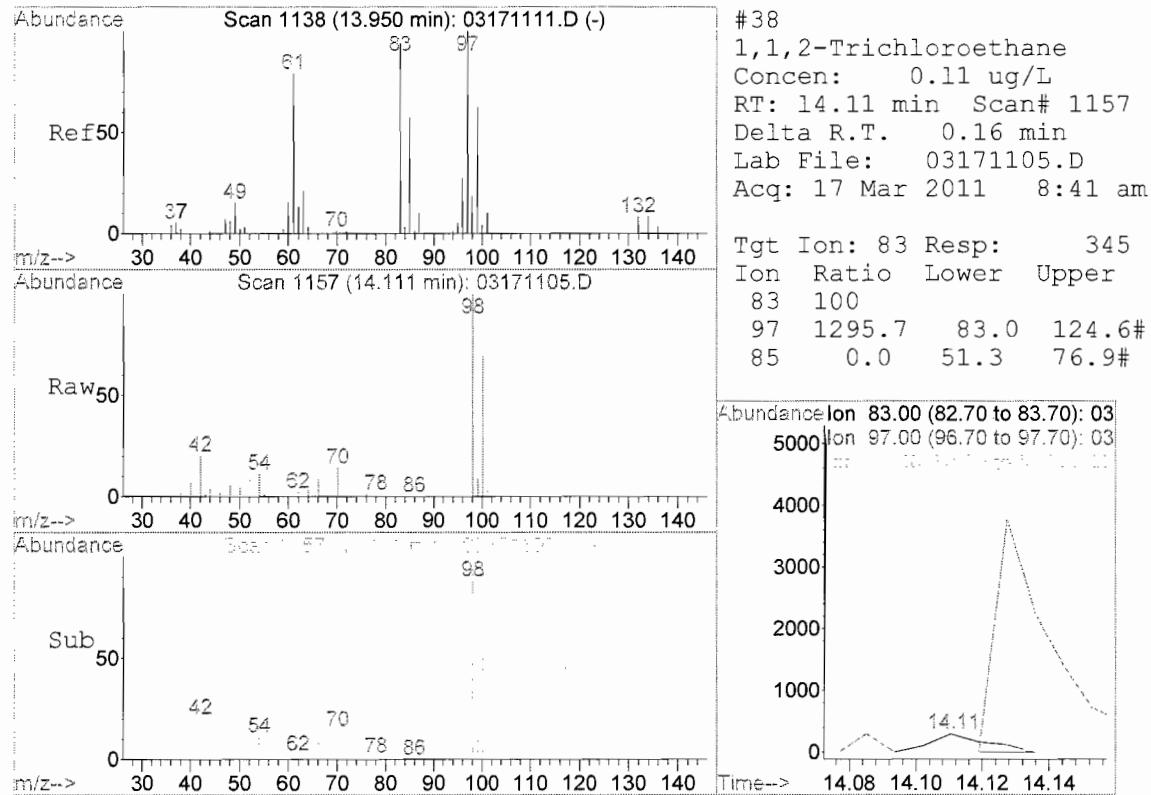
#13  
Carbon disulfide  
Concen: 0.27 ug/L  
RT: 8.02 min Scan# 436  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

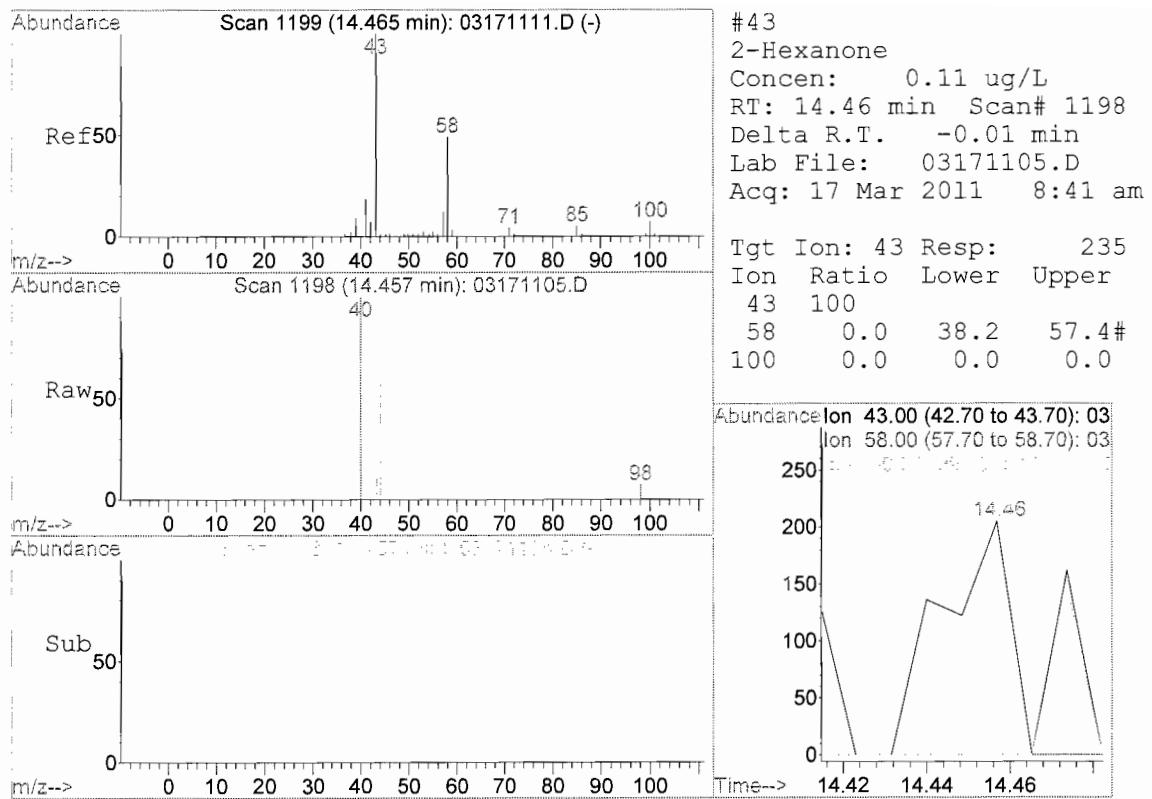
Tgt Ion: 76 Resp: 5282





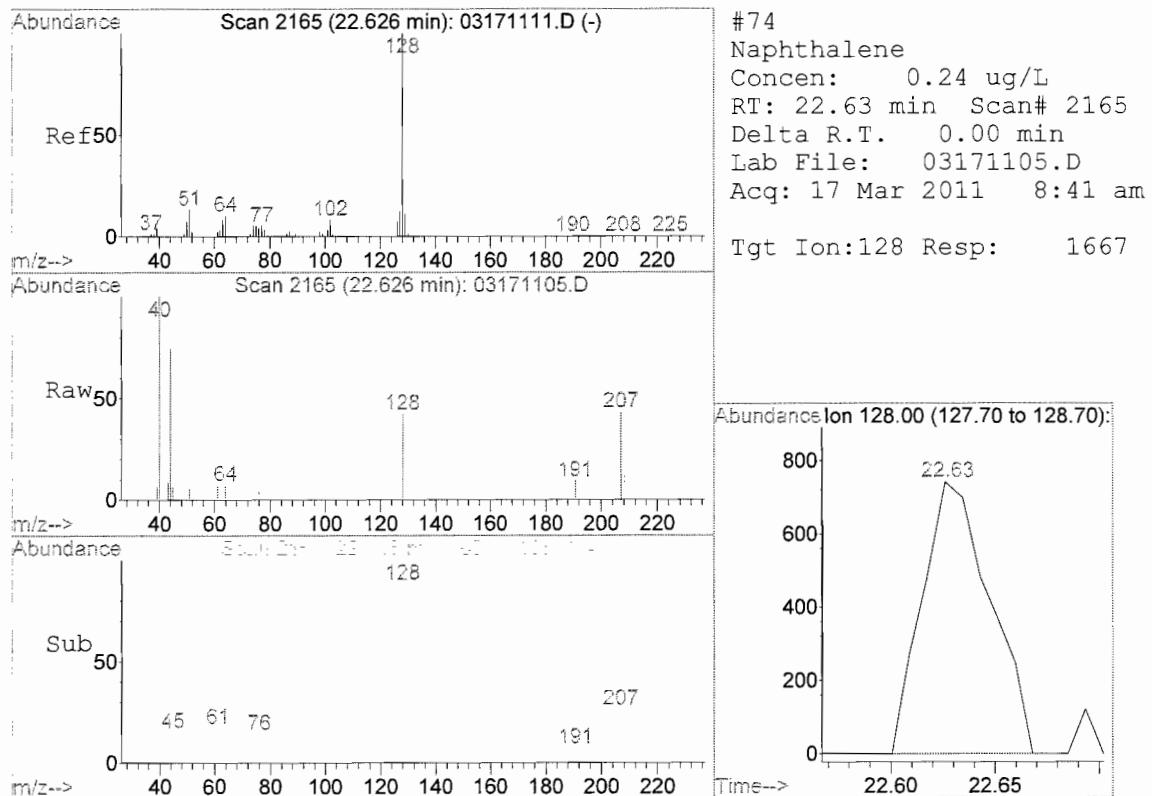
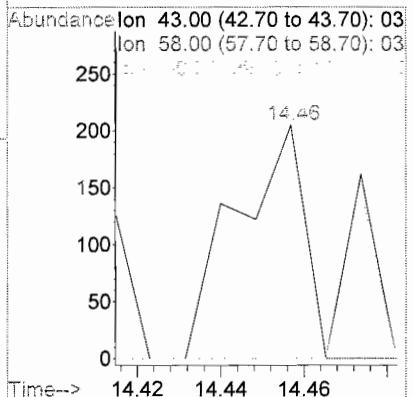
*m*  
*✓*





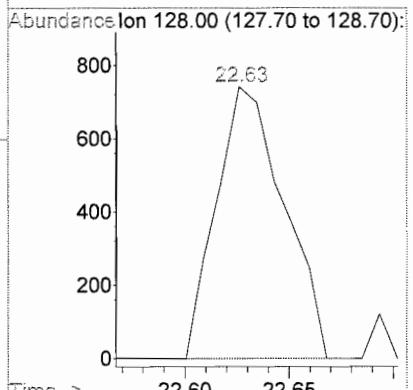
#43  
2-Hexanone  
Concen: 0.11 ug/L  
RT: 14.46 min Scan# 1198  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 43 Resp: 235  
Ion Ratio Lower Upper  
43 100  
58 0.0 38.2 57.4#  
100 0.0 0.0 0.0



#74  
Naphthalene  
Concen: 0.24 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 128 Resp: 1667



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	2490	0.59	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.36%	
39) Toluene-d8	14.12	98	8971	0.60	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.40%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.61	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.44%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.60	85	4286	0.54 ug/L # 90
3) Chloromethane	4.89	50	6587	0.50 ug/L 95
4) Vinyl chloride	5.18	62	6003	0.51 ug/L 90
5) Bromomethane	5.78	94	3084	0.76 ug/L 93
6) Chloroethane	5.97	64	3371	0.55 ug/L # 73
7) Trichlorofluoromethane	6.77	101	4364	0.54 ug/L 92
8) Acetone	6.93	43	1615	Below Cal # 66
9) Iodomethane	7.58	142	1272	0.47 ug/L 92
10) 1,1-Dichloroethene	7.50	96	2883	0.61 ug/L 93
11) Methylene chloride	7.70	84	3890	0.70 ug/L 97
12) Freon 113	7.77	101	3509	0.63 ug/L 92
13) Carbon disulfide	8.02	76	10027	0.60 ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53 ug/L # 92
15) MTBE	8.73	73	5033	0.56 ug/L # 72
16) 1,1-Dichloroethane	8.92	63	5945	0.54 ug/L 96
17) Vinyl acetate	9.08	43	4816	0.57 ug/L # 83
18) 2-Butanone (MEK)	9.46	72	199	1.62 ug/L # 34
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57 ug/L 90
20) Bromochloromethane	9.87	128	1134	0.57 ug/L # 93
21) Chloroform	9.93	83	4941	0.55 ug/L 100
22) 2,2-Dichloropropane	10.04	77	3858	0.53 ug/L 100
24) 1,2-Dichloroethane	10.77	62	2927	0.53 ug/L # 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.51 ug/L # 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53 ug/L 95
28) Carbon tetrachloride	11.39	117	2538	0.48 ug/L 92
29) Benzene	11.44	78	11043	0.54 ug/L 99
30) Dibromomethane	12.17	93	1308	0.54 ug/L # 87
31) 1,2-Dichloropropene	12.22	63	3128	0.55 ug/L # 97
32) Trichloroethene	12.27	95	2709	0.53 ug/L 98
33) Bromodichloromethane	12.33	83	3018	0.50 ug/L # 99
34) 2-Chlorovinylethylether	12.87	63	774	Below Cal # 55
35) cis-1,3-Dichloropropene	13.18	75	3500	0.48 ug/L # 88
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	2046	0.69 ug/L # 82
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46 ug/L # 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.51 ug/L 84
40) Toluene	14.21	92	6374	0.55 ug/L 96
42) 1,3-Dichloropropane	14.28	76	2607	0.47 ug/L 96

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031711.M Fri Mar 18 08:37:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

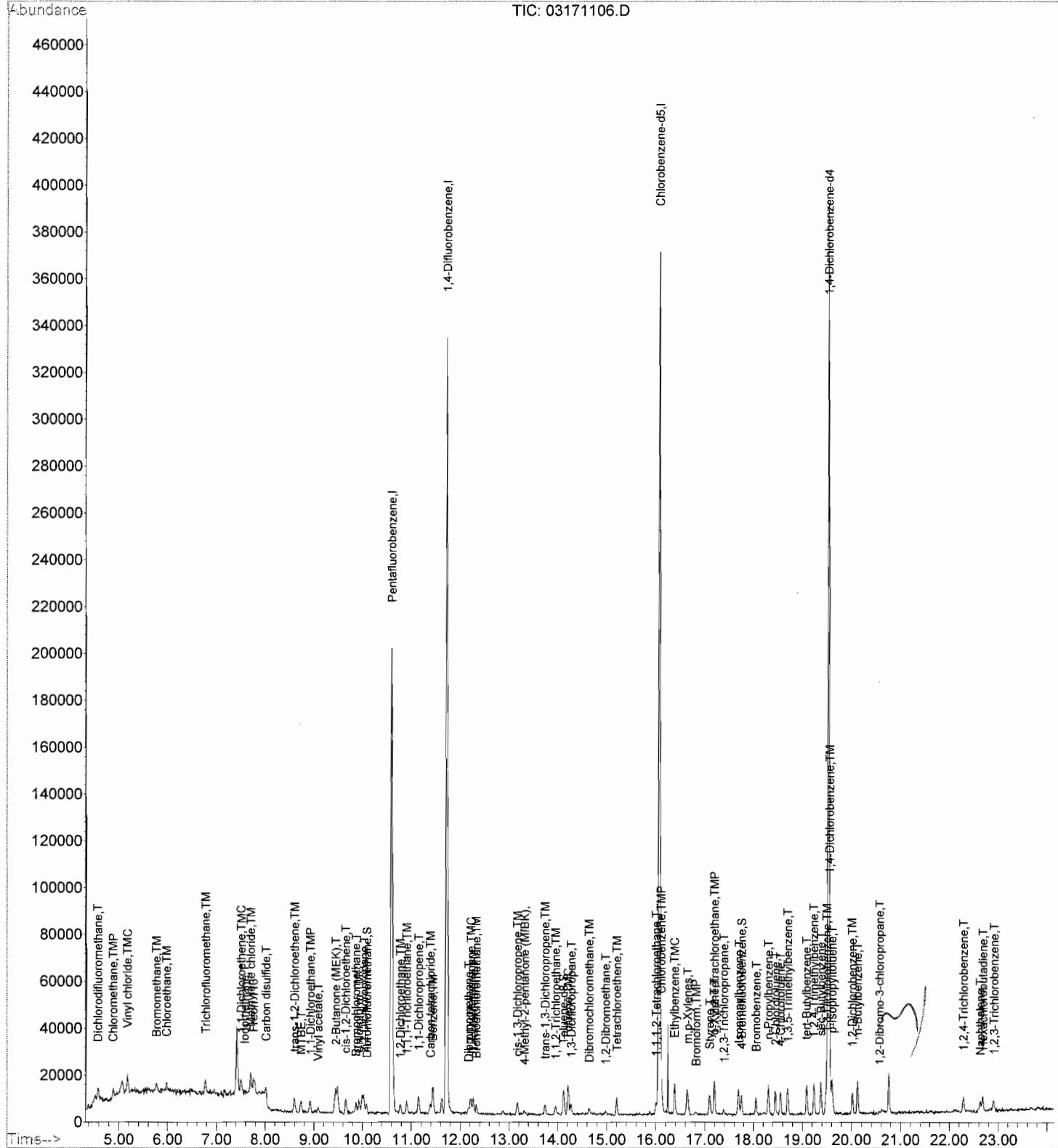
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Dibromochloromethane	14.65	129	2052	0.62	ug/L	85
45) 1,2-Dibromoethane	14.98	107	1293	0.47	ug/L	# 78
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.57	ug/L	# 53
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.55	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.59	ug/L	95
51) Styrene	17.10	104	5086	0.44	ug/L	# 78
52) o-Xylene	17.20	106	4214	0.57	ug/L	96
55) Bromoform	16.81	173	696	0.41	ug/L	# 64
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	# 93
57) 1,2,3-Trichloropropane	17.38	110	276	0.37	ug/L	# 62
58) Isopropylbenzene	17.70	105	9284	0.52	ug/L	99
59) Bromobenzene	18.05	156	1904	0.46	ug/L	83
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	97
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.53	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.51	ug/L	96
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.52	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	# 87
69) p-Isopropyltoluene	19.61	119	8395	0.49	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.54	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.50	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	71	0.16	ug/L	# 14
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.46	ug/L	81
74) Naphthalene	22.63	128	4307	0.69	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	0.48	ug/L	# 65
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.51	ug/L	87

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	3898	0.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	3.76%	
39) Toluene-d8	14.12	98	14880	1.01	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.04%	
53) 4-Bromofluorobenzene	17.76	95	5477	1.03	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.12%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.58	85	7417	0.96	ug/L 94
3) Chloromethane	4.89	50	11297	0.88	ug/L 99
4) Vinyl chloride	5.18	62	11731	1.03	ug/L # 84
5) Bromomethane	5.77	94	5200	1.12	ug/L 94
6) Chloroethane	5.98	64	6815	1.13	ug/L # 88
7) Trichlorofluoromethane	6.77	101	8152	1.03	ug/L 91
8) Acetone	6.93	43	2180	Below Cal	96
9) Iodomethane	7.57	142	3864	1.18	ug/L # 86
10) 1,1-Dichloroethene	7.51	96	5486	1.19	ug/L 97
11) Methylene chloride	7.70	84	6767	1.24	ug/L 92
12) Freon 113	7.78	101	6284	1.15	ug/L 98
13) Carbon disulfide	8.02	76	17829	1.08	ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.19	ug/L 85
15) MTBE	8.73	73	10605	1.21	ug/L # 88
16) 1,1-Dichloroethane	8.92	63	12255	1.15	ug/L # 97
17) Vinyl acetate	9.09	43	9903	1.19	ug/L # 93
18) 2-Butanone (MEK)	9.48	72	190	1.60	ug/L # 1
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L 96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L 97
21) Chloroform	9.93	83	8465	0.96	ug/L 99
22) 2,2-Dichloropropane	10.03	77	6968	0.98	ug/L # 90
24) 1,2-Dichloroethane	10.78	62	5936	1.10	ug/L # 76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.97	ug/L # 56
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L # 93
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L 98
29) Benzene	11.44	78	20409	1.02	ug/L 97
30) Dibromomethane	12.17	93	2529	1.07	ug/L 94
31) 1,2-Dichloropropane	12.21	63	5383	0.96	ug/L # 90
32) Trichloroethene	12.26	95	4847	0.97	ug/L 95
33) Bromodichloromethane	12.32	83	5644	0.96	ug/L # 87
34) 2-Chlorovinylethylether	12.86	63	1739	0.28	ug/L # 80
35) cis-1,3-Dichloropropene	13.18	75	6952	0.98	ug/L 95
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.19	ug/L # 89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L 99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.99	ug/L # 84
40) Toluene	14.22	92	10459	0.92	ug/L 93
42) 1,3-Dichloropropane	14.27	76	5543	1.01	ug/L # 75

(#) = qualifier out of range (m) = manual integration

03171107.D 031711.M Fri Mar 18 08:37:19 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.37	ug/L #	71
44) Dibromochloromethane	14.65	129	2863	0.86	ug/L	97
45) 1,2-Dibromoethane	14.98	107	2446	0.88	ug/L #	77
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	94
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.00	ug/L #	59
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	93
49) Ethylbenzene	16.38	91	20598	0.96	ug/L	98
50) m,p-Xylenes	16.64	106	6910	0.92	ug/L	93
51) Styrene	17.10	104	10355	0.90	ug/L	99
52) o-Xylene	17.20	106	7210	0.98	ug/L	87
55) Bromoform	16.81	173	1545	0.94	ug/L #	76
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L #	91
57) 1,2,3-Trichloropropane	17.38	110	807	1.12	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.94	ug/L	99
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.97	ug/L	100
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.95	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.97	ug/L	99
66) sec-Butylbenzene	19.38	105	21187	0.97	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	93
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	97
69) p-Isopropyltoluene	19.61	119	15312	0.92	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.94	ug/L	99
71) n-Butylbenzene	20.11	91	17346	0.93	ug/L	96
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.89	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	4683	1.02	ug/L	95
74) Naphthalene	22.63	128	5978	0.99	ug/L	100
75) Hexachlorobutadiene	22.68	225	2850	0.98	ug/L	89
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.93	ug/L	93

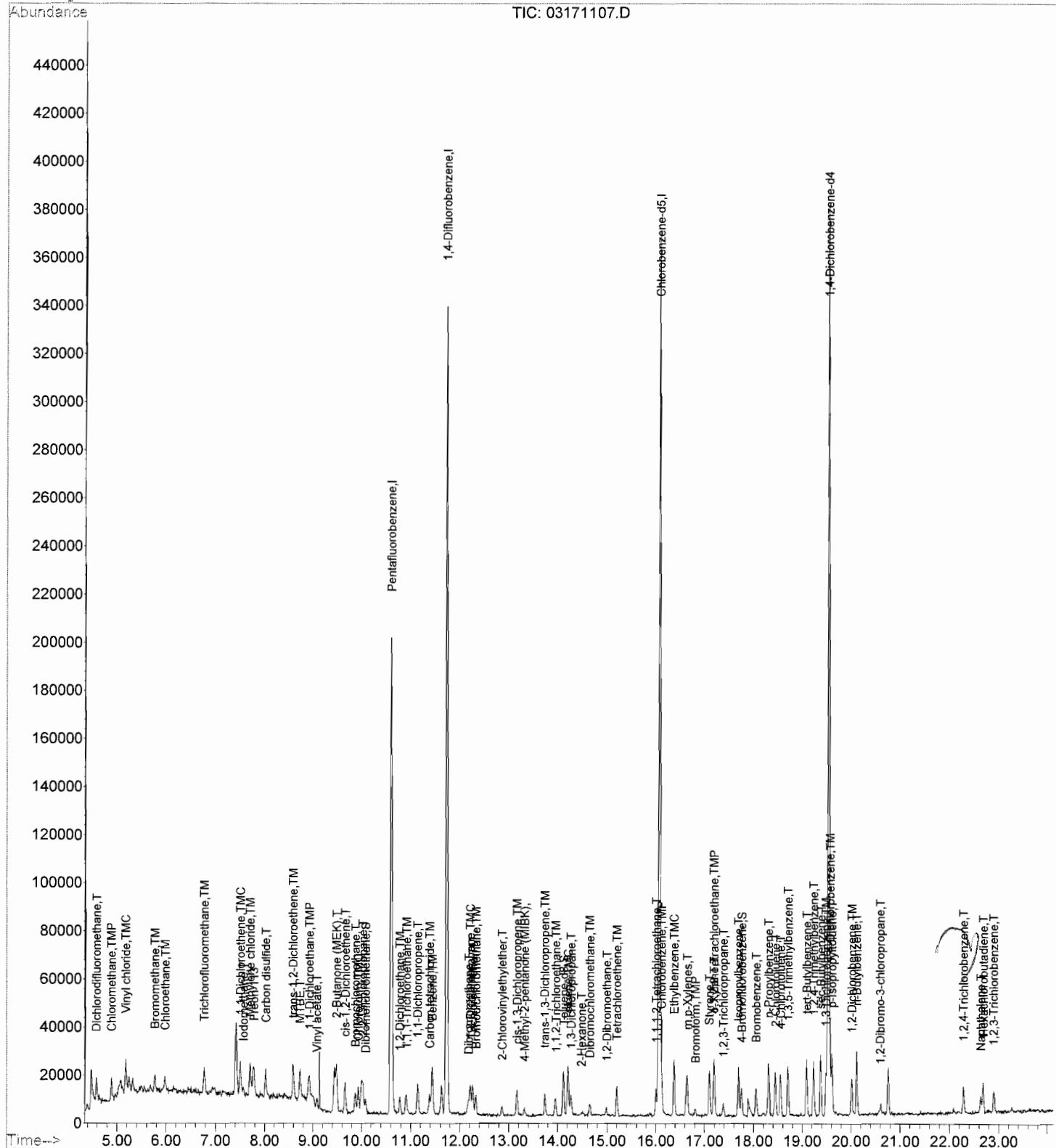
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Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	7767	1.85	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.40%	
39) Toluene-d8	14.12	98	28802	1.93	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.72%	
53) 4-Bromofluorobenzene	17.75	95	10411	1.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.76%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	15723	1.99	ug/L	96
3) Chloromethane	4.89	50	22795	1.75	ug/L	97
4) Vinyl chloride	5.18	62	22297	1.92	ug/L	95
5) Bromomethane	5.77	94	6970	1.40	ug/L	99
6) Chloroethane	5.98	64	11754	1.91	ug/L	# 83
7) Trichlorofluoromethane	6.78	101	16143	2.00	ug/L	99
8) Acetone	6.94	43	4997	1.82	ug/L	✓ 99
9) Iodomethane	7.57	142	5343	1.55	ug/L	93
10) 1,1-Dichloroethene	7.51	96	8308	1.76	ug/L	96
11) Methylene chloride	7.71	84	10726	1.93	ug/L	98
12) Freon 113	7.77	101	10221	1.83	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.80	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.83	ug/L	97
15) MTBE	8.73	73	16615	1.86	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.89	ug/L	98
17) Vinyl acetate	9.08	43	14566	1.72	ug/L	# 95
18) 2-Butanone (MEK)	9.47	72	179	1.55	ug/L	# 1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.02	ug/L	92
20) Bromochloromethane	9.88	128	3627	1.84	ug/L	95
21) Chloroform	9.93	83	18162	2.02	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.93	ug/L	98
24) 1,2-Dichloroethane	10.78	62	10721	1.96	ug/L	# 93
25) 1,1,1-Trichloroethane	10.91	97	12034	1.87	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	98
28) Carbon tetrachloride	11.38	117	9830	1.88	ug/L	94
29) Benzene	11.44	78	39494	1.95	ug/L	100
30) Dibromomethane	12.17	93	4597	1.92	ug/L	92
31) 1,2-Dichloropropane	12.22	63	10960	1.93	ug/L	# 96
32) Trichloroethene	12.27	95	9761	1.92	ug/L	96
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	96
34) 2-Chlorovinylethylether	12.87	63	2637	1.16	ug/L	# 83
35) cis-1,3-Dichloropropene	13.16	75	13465	1.86	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.79	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.86	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.95	ug/L	96
40) Toluene	14.21	92	22811	1.98	ug/L	95
42) 1,3-Dichloropropane	14.28	76	10418	1.88	ug/L	90

(#) = qualifier out of range (m) = manual integration

03171108.D 031711.M Fri Mar 18 08:37:34 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

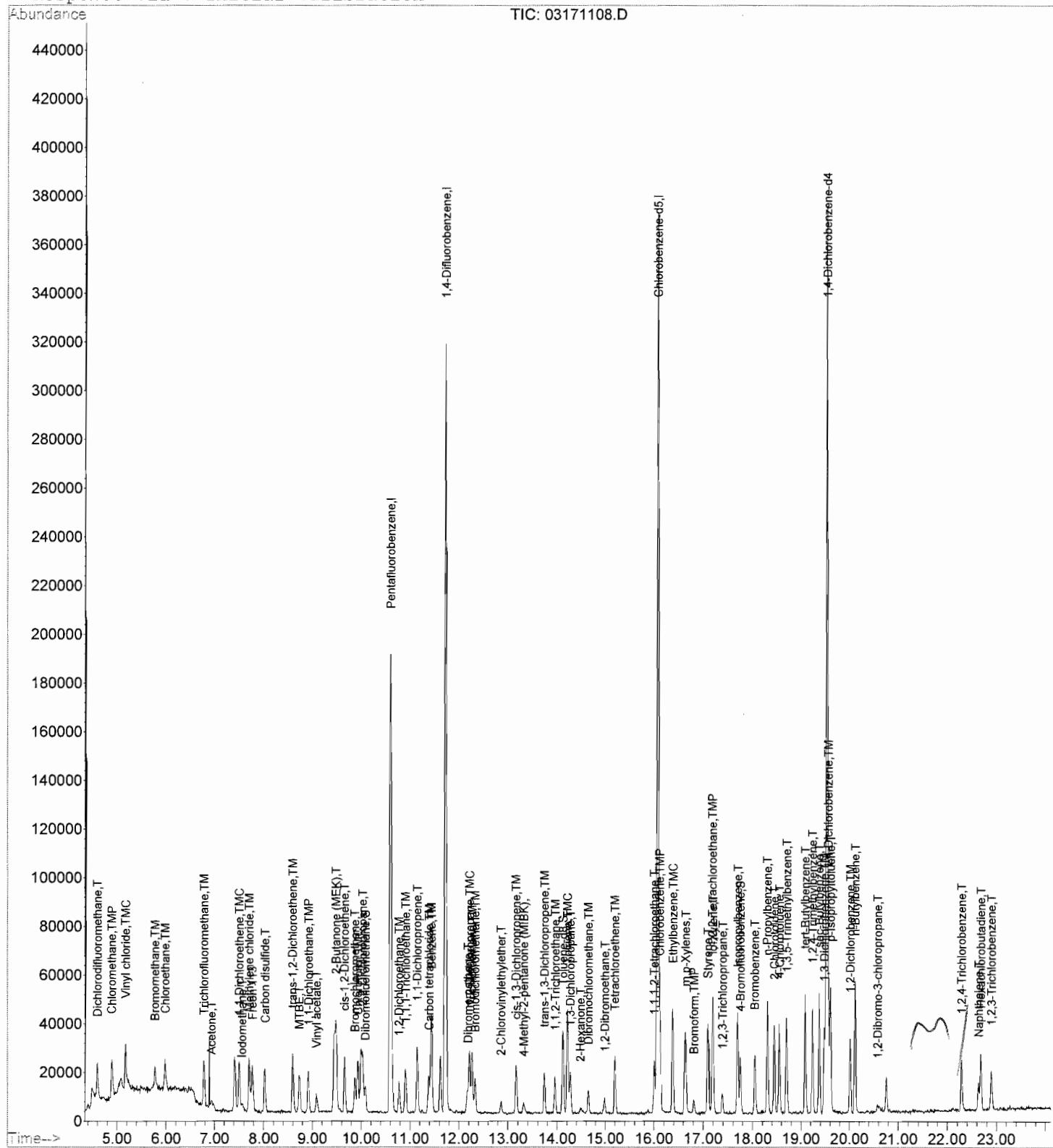
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2474	1.34	ug/L #	88
44) Dibromochloromethane	14.65	129	6238	1.88	ug/L	98
45) 1,2-Dibromoethane	14.99	107	5443	1.96	ug/L #	98
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.88	ug/L	92
48) Chlorobenzene	16.12	112	21803	1.90	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.88	ug/L	100
50) m,p-Xylenes	16.64	106	14567	1.92	ug/L	98
51) Styrene	17.09	104	21955	1.91	ug/L	99
52) o-Xylene	17.19	106	14080	1.91	ug/L	99
55) Bromoform	16.81	173	2978	1.82	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	93
57) 1,2,3-Trichloropropane	17.40	110	1450	2.02	ug/L	94
58) Isopropylbenzene	17.69	105	34246	1.98	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	96
60) n-Propylbenzene	18.30	91	47531	1.93	ug/L	98
61) 2-Chlorotoluene	18.44	91	27642	1.91	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.91	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.91	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.96	ug/L	95
66) sec-Butylbenzene	19.38	105	43119	1.98	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	16064	1.98	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	97
69) p-Isopropyltoluene	19.61	119	32053	1.93	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	13744	1.95	ug/L	98
71) n-Butylbenzene	20.12	91	35106	1.90	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.21	ug/L #	79
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.83	ug/L	96
74) Naphthalene	22.63	128	10824	1.79	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.96	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.89	ug/L	94

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
Acq On : 17 Mar 2011 10:14 am Operator: LC  
Sample : 2.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P

Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	22772	5.52	ug/L	0.00
Spiked Amount 25.000			Recovery	=	22.08%	
39) Toluene-d8	14.12	98	75601	5.05	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.20%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.10	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.40%	

## Target Compounds

				Qvalue	
2) Dichlorodifluoromethane	4.60	85	43993	5.68	ug/L 96
3) Chloromethane	4.90	50	69304	5.42	ug/L 98
4) Vinyl chloride	5.18	62	59531	5.23	ug/L 97
5) Bromomethane	5.77	94	23286	4.14	ug/L 93
6) Chloroethane	5.98	64	31380	5.20	ug/L 95
7) Trichlorofluoromethane	6.78	101	44900	5.67	ug/L 97
8) Acetone	6.94	43	8551	6.12	ug/L 98
9) Iodomethane	7.57	142	19144	5.33	ug/L 97
10) 1,1-Dichloroethene	7.51	96	23635	5.12	ug/L 97
11) Methylene chloride	7.71	84	29505	5.43	ug/L 97
12) Freon 113	7.78	101	28220	5.16	ug/L 99
13) Carbon disulfide	8.03	76	88631	5.39	ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.35	ug/L 91
15) MTBE	8.74	73	47481	5.43	ug/L 99
16) 1,1-Dichloroethane	8.92	63	57409	5.38	ug/L 99
17) Vinyl acetate	9.09	43	45219	5.46	ug/L 98
18) 2-Butanone (MEK)	9.47	72	1224	5.50	ug/L # 37
19) cis-1,2-Dichloroethene	9.66	96	29437	5.56	ug/L 94
20) Bromochloromethane	9.87	128	11063	5.71	ug/L 95
21) Chloroform	9.93	83	49311	5.60	ug/L 96
22) 2,2-Dichloropropane	10.04	77	39536	5.54	ug/L 100
24) 1,2-Dichloroethane	10.78	62	29254	5.45	ug/L 98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.54	ug/L 98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L 98
28) Carbon tetrachloride	11.38	117	28340	5.40	ug/L 98
29) Benzene	11.44	78	106054	5.22	ug/L 98
30) Dibromomethane	12.17	93	12758	5.31	ug/L 97
31) 1,2-Dichloropropane	12.21	63	30926	5.45	ug/L 99
32) Trichloroethene	12.26	95	27719	5.46	ug/L 95
33) Bromodichloromethane	12.33	83	32710	5.49	ug/L 96
34) 2-Chlorovinylethylether	12.86	63	7315	5.89	ug/L 96
35) cis-1,3-Dichloropropene	13.17	75	39480	5.45	ug/L 99
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	5.15	ug/L 96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L 97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.40	ug/L 99
40) Toluene	14.21	92	60380	5.23	ug/L 98
42) 1,3-Dichloropropane	14.27	76	31749	5.68	ug/L 98

(#) = qualifier out of range (m) = manual integration

03171109.D 031711.M Fri Mar 18 08:37:49 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

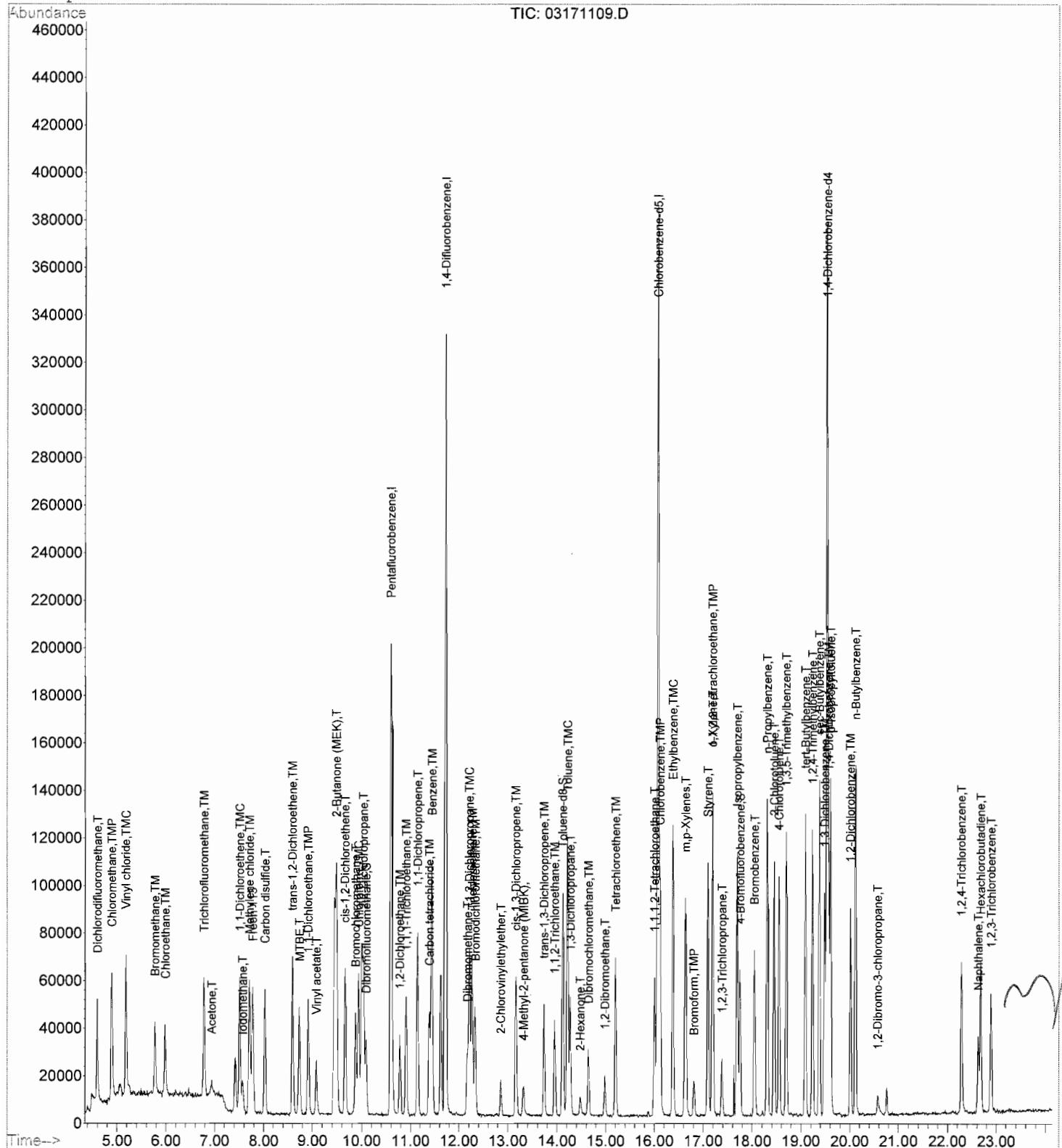
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.70	ug/L #	86
44) Dibromochloromethane	14.64	129	17145	5.10	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.66	ug/L #	98
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.02	ug/L	96
48) Chlorobenzene	16.12	112	60084	5.17	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.13	ug/L	99
50) m,p-Xylenes	16.64	106	39718	5.18	ug/L	100
51) Styrene	17.09	104	62548	5.38	ug/L	98
52) o-Xylene	17.20	106	38050	5.11	ug/L	98
55) Bromoform	16.81	173	9209	5.49	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	4203	5.70	ug/L	90
58) Isopropylbenzene	17.69	105	91339	5.15	ug/L	98
59) Bromobenzene	18.05	156	21568	5.27	ug/L	95
60) n-Propylbenzene	18.30	91	134531	5.32	ug/L	98
61) 2-Chlorotoluene	18.45	91	75803	5.11	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	97
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.17	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.10	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.13	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.17	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	42641	5.12	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.11	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.28	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.24	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.73	ug/L	90
73) 1,2,4-Trichlorobenzene	22.28	180	24323	5.20	ug/L	100
74) Naphthalene	22.63	128	32491	5.23	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.92	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	20581	5.39	ug/L	98

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
Acq On : 17 Mar 2011 10:45 am Operator: LC  
Sample : 5.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P

Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	42710	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.72%	
39) Toluene-d8	14.12	98	143321	9.62	ug/L	0.00
Spiked Amount 25.000			Recovery	=	38.48%	
53) 4-Bromofluorobenzene	17.75	95	50923	9.49	ug/L	0.00
Spiked Amount 25.000			Recovery	=	37.96%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.60	85	79957	10.15	ug/L
3) Chloromethane	4.89	50	135497	10.40	ug/L
4) Vinyl chloride	5.19	62	111850	9.64	ug/L
5) Bromomethane	5.78	94	53427	9.01	ug/L
6) Chloroethane	5.98	64	63788	10.38	ug/L
7) Trichlorofluoromethane	6.78	101	85392	10.59	ug/L
8) Acetone	6.94	43	11502	9.36	ug/L
9) Iodomethane	7.57	142	36401	9.84	ug/L
10) 1,1-Dichloroethene	7.51	96	46909	9.97	ug/L
11) Methylene chloride	7.71	84	55460	10.02	ug/L
12) Freon 113	7.78	101	52409	9.41	ug/L
13) Carbon disulfide	8.03	76	162804	9.73	ug/L
14) trans-1,2-Dichloroethene	8.60	96	51126	9.82	ug/L
15) MTBE	8.74	73	84759	9.53	ug/L
16) 1,1-Dichloroethane	8.92	63	108838	10.03	ug/L
17) Vinyl acetate	9.09	43	81810	9.70	ug/L
18) 2-Butanone (MEK)	9.47	72	2658	10.73	ug/L
19) cis-1,2-Dichloroethene	9.66	96	53573	9.94	ug/L
20) Bromochloromethane	9.88	128	20976	10.64	ug/L
21) Chloroform	9.93	83	95119	10.62	ug/L
22) 2,2-Dichloropropane	10.04	77	73939	10.18	ug/L
24) 1,2-Dichloroethane	10.77	62	53618	9.81	ug/L
25) 1,1,1-Trichloroethane	10.91	97	66517	10.34	ug/L
27) 1,1-Dichloropropene	11.15	75	77127	10.20	ug/L
28) Carbon tetrachloride	11.39	117	54162	10.38	ug/L
29) Benzene	11.44	78	201076	9.95	ug/L
30) Dibromomethane	12.17	93	24596	10.29	ug/L
31) 1,2-Dichloropropane	12.21	63	55294	9.80	ug/L
32) Trichloroethene	12.27	95	49861	9.87	ug/L
33) Bromodichloromethane	12.33	83	60334	10.17	ug/L
34) 2-Chlorovinylethylether	12.86	63	12810	11.51	ug/L
35) cis-1,3-Dichloropropene	13.17	75	73950	10.27	ug/L
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.82	ug/L
37) trans-1,3-Dichloropropene	13.73	75	56973	10.25	ug/L
38) 1,1,2-Trichloroethane	13.95	83	27640	10.34	ug/L
40) Toluene	14.21	92	114354	9.95	ug/L
42) 1,3-Dichloropropane	14.27	76	56624	10.22	ug/L

(#) = qualifier out of range (m) = manual integration

03171110.D 031711.M Fri Mar 18 08:38:05 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

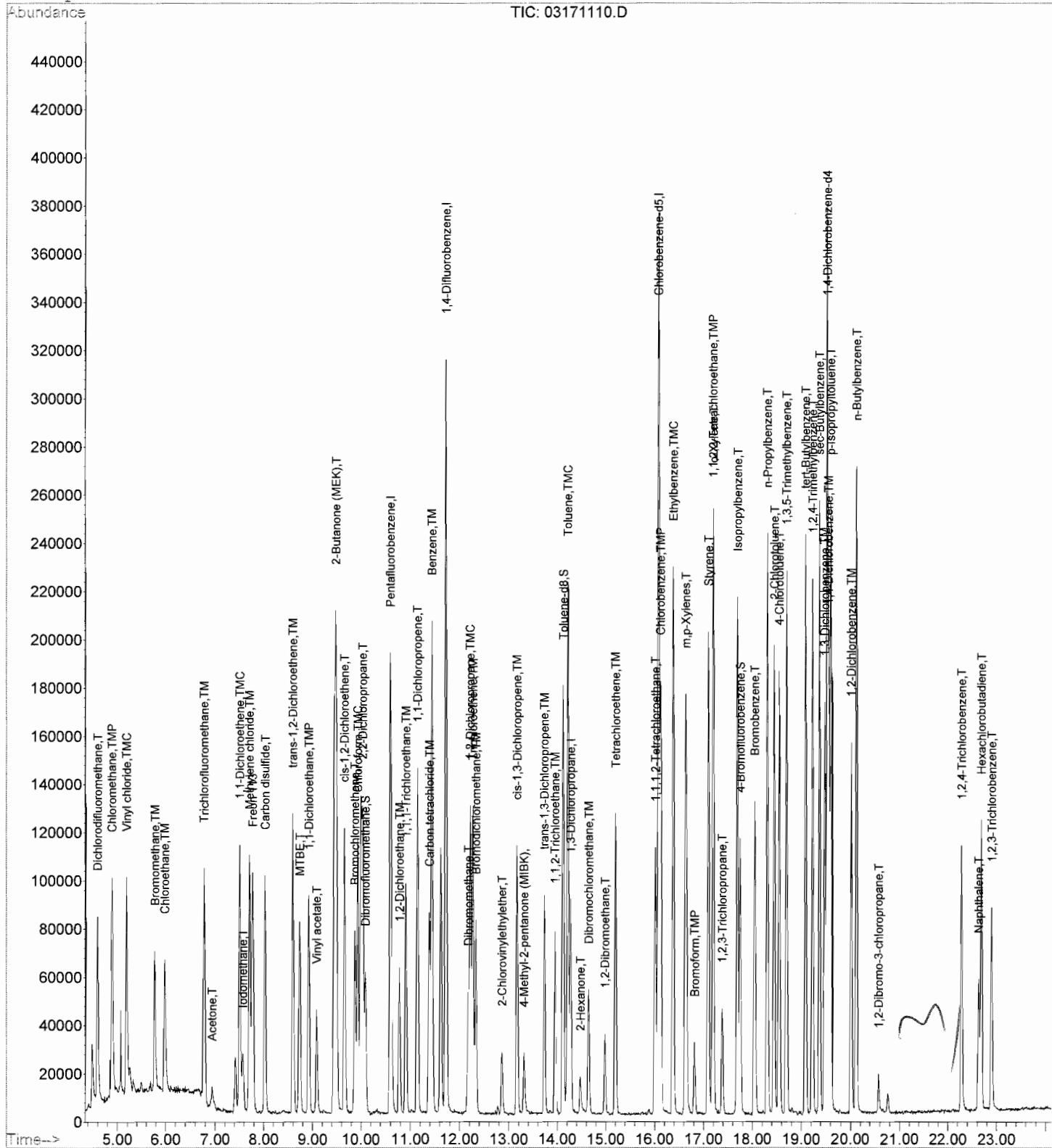
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.53	ug/L #	98
44) Dibromochloromethane	14.64	129	32389	9.72	ug/L	99
45) 1,2-Dibromoethane	14.98	107	28536	10.26	ug/L	97
46) Tetrachloroethene	15.21	166	44478	10.13	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	9.79	ug/L	98
48) Chlorobenzene	16.12	112	113625	9.87	ug/L	99
49) Ethylbenzene	16.38	91	215370	9.93	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.77	ug/L	99
51) Styrene	17.09	104	115227	10.01	ug/L	99
52) o-Xylene	17.20	106	71920	9.74	ug/L	100
55) Bromoform	16.81	173	16316	10.27	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L #	97
57) 1,2,3-Trichloropropane	17.39	110	7243	10.36	ug/L	91
58) Isopropylbenzene	17.69	105	176438	10.50	ug/L	99
59) Bromobenzene	18.05	156	40825	10.53	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.45	ug/L	99
61) 2-Chlorotoluene	18.45	91	143690	10.22	ug/L	100
62) 4-Chlorotoluene	18.55	91	141563	10.16	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.42	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.37	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.25	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.17	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.41	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	69024	10.04	ug/L	98
71) n-Butylbenzene	20.12	91	183374	10.17	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	10.84	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	41924	9.44	ug/L	100
74) Naphthalene	22.63	128	55616	9.45	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.24	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	34759	9.60	ug/L	98

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
Acq On : 17 Mar 2011 11:15 am Operator: LC  
Sample : 10 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplir: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

✓  
Re✓

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	103380	25.00	ug/L	0.00
Spiked Amount 25.000				Recovery	=	100.00%
39) Toluene-d8	14.12	98	359841	24.50	ug/L	0.00
Spiked Amount 25.000				Recovery	=	98.00%
53) 4-Bromofluorobenzene	17.75	95	128707	24.22	ug/L	0.00
Spiked Amount 25.000				Recovery	=	96.88%

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.60	85	200064	25.77 ug/L 100
3) Chloromethane	4.89	50	322628	25.13 ug/L 100
4) Vinyl chloride	5.18	62	283499	24.80 ug/L 100
5) Bromomethane	5.78	94	141242	23.74 ug/L 100
6) Chloroethane	5.98	64	150117	24.77 ug/L 100
7) Trichlorofluoromethane	6.78	101	214158	26.95 ug/L 100
8) Acetone	6.94	43	25928	26.49 ug/L 100
9) Iodomethane	7.57	142	98109	26.69 ug/L 100
10) 1,1-Dichloroethene	7.51	96	111502	24.05 ug/L 100
11) Methylene chloride	7.71	84	132209	24.24 ug/L 100
12) Freon 113	7.77	101	133636	24.35 ug/L 100
13) Carbon disulfide	8.03	76	401884	24.37 ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.73 ug/L 100
15) MTBE	8.74	73	214946	24.52 ug/L 100
16) 1,1-Dichloroethane	8.92	63	264682	24.74 ug/L 100
17) Vinyl acetate	9.08	43	202265	24.34 ug/L 100
18) 2-Butanone (MEK)	9.47	72	6903	26.82 ug/L 100
19) cis-1,2-Dichloroethene	9.66	96	131490	24.75 ug/L 100
20) Bromochloromethane	9.87	128	47437	24.40 ug/L 100
21) Chloroform	9.93	83	218360	24.73 ug/L 100
22) 2,2-Dichloropropane	10.04	77	180118	25.16 ug/L 100
24) 1,2-Dichloroethane	10.78	62	136474	25.33 ug/L 100
25) 1,1,1-Trichloroethane	10.91	97	162207	25.58 ug/L 100
27) 1,1-Dichloropropene	11.15	75	191506	25.69 ug/L 100
28) Carbon tetrachloride	11.39	117	133369	25.91 ug/L 100
29) Benzene	11.44	78	490622	24.62 ug/L 100
30) Dibromomethane	12.17	93	58067	24.63 ug/L 100
31) 1,2-Dichloropropane	12.21	63	140014	25.15 ug/L 100
32) Trichloroethene	12.27	95	124690	25.02 ug/L 100
33) Bromodichloromethane	12.33	83	150764	25.77 ug/L 100
34) 2-Chlorovinylethylether	12.86	63	29010	28.39 ug/L 100
35) cis-1,3-Dichloropropene	13.16	75	183565	25.85 ug/L 100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	24.58 ug/L 100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.79 ug/L 100
38) 1,1,2-Trichloroethane	13.95	83	66374	25.19 ug/L 100
40) Toluene	14.21	92	282149	24.90 ug/L 100
42) 1,3-Dichloropropane	14.27	76	140210	25.55 ug/L 100

(#) = qualifier out of range (m) = manual integration

03171111.D 031711.M Fri Mar 18 08:38:20 2011

Page 1

3/21/11

LC 03/08/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

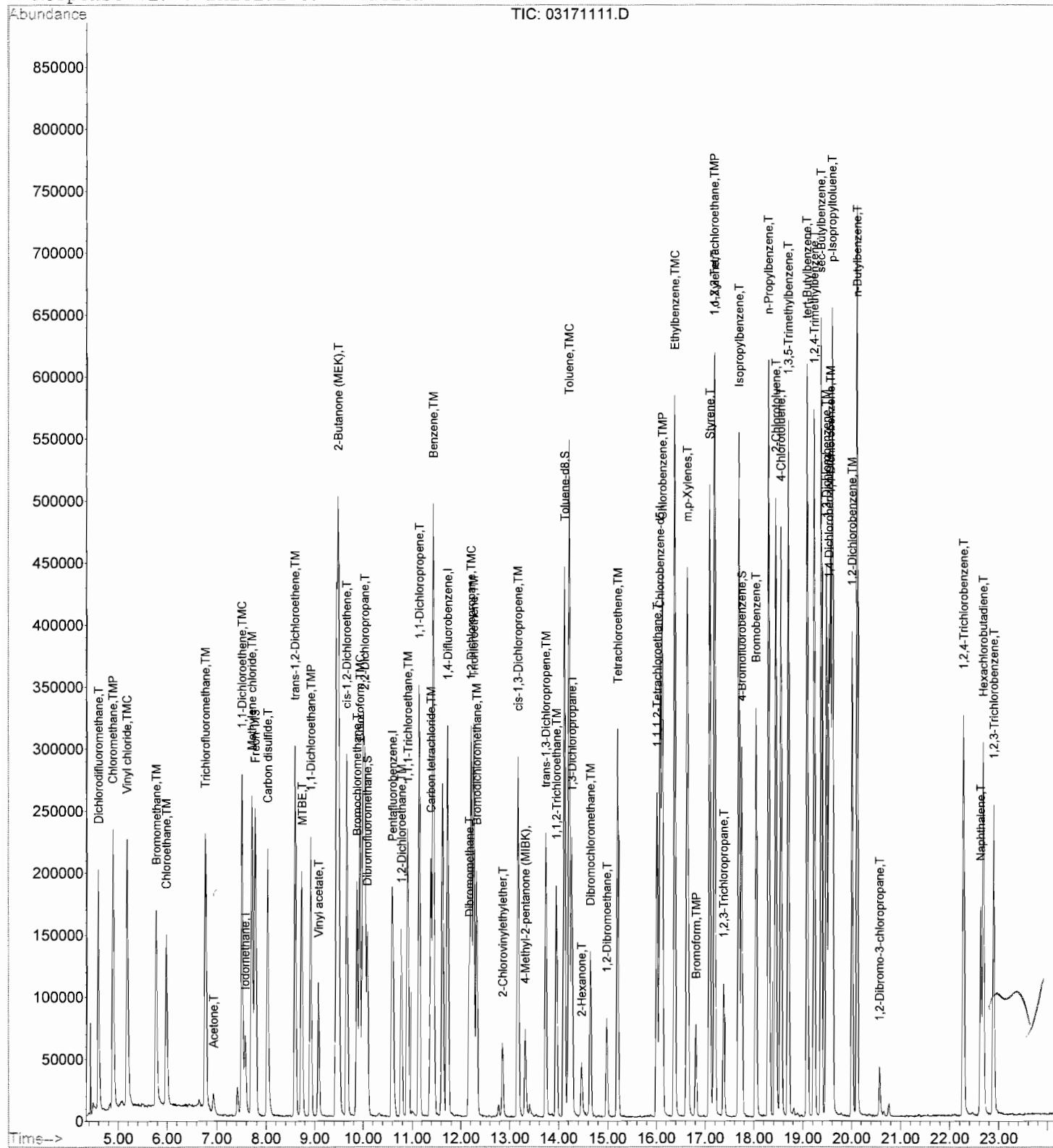
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	24.30	ug/L #	100
44) Dibromochloromethane	14.64	129	81864	24.81	ug/L	100
45) 1,2-Dibromoethane	14.98	107	70424	25.57	ug/L	100
46) Tetrachloroethene	15.21	166	109364	25.15	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	24.44	ug/L	100
48) Chlorobenzene	16.12	112	284407	24.96	ug/L	100
49) Ethylbenzene	16.37	91	538674	25.09	ug/L	100
50) m,p-Xylenes	16.64	106	186494	24.80	ug/L	100
51) Styrene	17.09	104	295005	25.87	ug/L	100
52) o-Xylene	17.19	106	177920	24.34	ug/L	100
55) Bromoform	16.81	173	42372	26.07	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	25.00	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18834	26.34	ug/L	100
58) Isopropylbenzene	17.69	105	445254	25.90	ug/L	100
59) Bromobenzene	18.05	156	105054	26.49	ug/L	100
60) n-Propylbenzene	18.30	91	632559	25.78	ug/L	100
61) 2-Chlorotoluene	18.44	91	364433	25.35	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.89	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.71	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.63	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.64	ug/L	100
66) sec-Butylbenzene	19.37	105	556785	25.69	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	205642	25.45	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	201942	24.82	ug/L	100
69) p-Isopropyltoluene	19.61	119	434002	26.19	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.44	ug/L	100
71) n-Butylbenzene	20.12	91	487367	26.43	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	25.84	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	122376	26.96	ug/L	100
74) Naphthalene	22.63	128	163821	27.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	26.49	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	101564	27.44	ug/L	100

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P

Quant Time: Mar 18 8:38 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	202044	46.49	ug/L	0.00
Spiked Amount	25.000		Recovery	= 185.96%		
39) Toluene-d8	14.11	98	726789	47.56	ug/L	0.00
Spiked Amount	25.000		Recovery	= 190.24%		
53) 4-Bromofluorobenzene	17.76	95	259969	47.19	ug/L	0.00
Spiked Amount	25.000		Recovery	= 188.76%		

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.60	85	391099	47.93 ug/L 98
3) Chloromethane	4.90	50	687656	50.97 ug/L 99
4) Vinyl chloride	5.18	62	596978	49.70 ug/L 98
5) Bromomethane	5.78	94	296252	47.13 ug/L 98
6) Chloroethane	5.99	64	300876	47.25 ug/L 99
7) Trichlorofluoromethane	6.78	101	340516	40.77 ug/L 97
8) Acetone	6.93	43	44278	45.51 ug/L 99
9) Iodomethane	7.58	142	195341	50.45 ug/L 98
10) 1,1-Dichloroethene	7.52	96	220268	45.21 ug/L 99
11) Methylene chloride	7.71	84	264019	46.07 ug/L 99
12) Freon 113	7.78	101	262900	45.58 ug/L 99
13) Carbon disulfide	8.03	76	807912	46.61 ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.15 ug/L 98
15) MTBE	8.73	73	407385	44.23 ug/L 99
16) 1,1-Dichloroethane	8.92	63	517515	46.02 ug/L 99
17) Vinyl acetate	9.08	43	400997	45.91 ug/L 99
18) 2-Butanone (MEK)	9.47	72	13656	49.70 ug/L 99
19) cis-1,2-Dichloroethene	9.66	96	257331	46.10 ug/L 99
20) Bromochloromethane	9.87	128	96376	47.18 ug/L 96
21) Chloroform	9.93	83	424654	45.77 ug/L 99
22) 2,2-Dichloropropane	10.03	77	364919	48.51 ug/L 99
24) 1,2-Dichloroethane	10.78	62	261605	46.20 ug/L 100
25) 1,1,1-Trichloroethane	10.91	97	323769	48.60 ug/L 99
27) 1,1-Dichloropropene	11.15	75	381624	49.20 ug/L 99
28) Carbon tetrachloride	11.39	117	268038	50.05 ug/L 100
29) Benzene	11.44	78	1008066	48.61 ug/L 98
30) Dibromomethane	12.17	93	116662	47.55 ug/L 98
31) 1,2-Dichloropropane	12.21	63	281688	48.64 ug/L 100
32) Trichloroethene	12.26	95	255144	49.21 ug/L 99
33) Bromodichloromethane	12.33	83	300337	49.34 ug/L 99
34) 2-Chlorovinylethylether	12.86	63	52192	50.19 ug/L 97
35) cis-1,3-Dichloropropene	13.17	75	364674	49.35 ug/L 100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	47.40 ug/L 99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.75 ug/L 100
38) 1,1,2-Trichloroethane	13.95	83	131924	48.12 ug/L 99
40) Toluene	14.22	92	583744	49.52 ug/L 98
42) 1,3-Dichloropropane	14.27	76	277506	48.79 ug/L 97

( # ) = qualifier out of range ( m ) = manual integration

03171112.D 031711.M Fri Mar 18 08:38:39 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

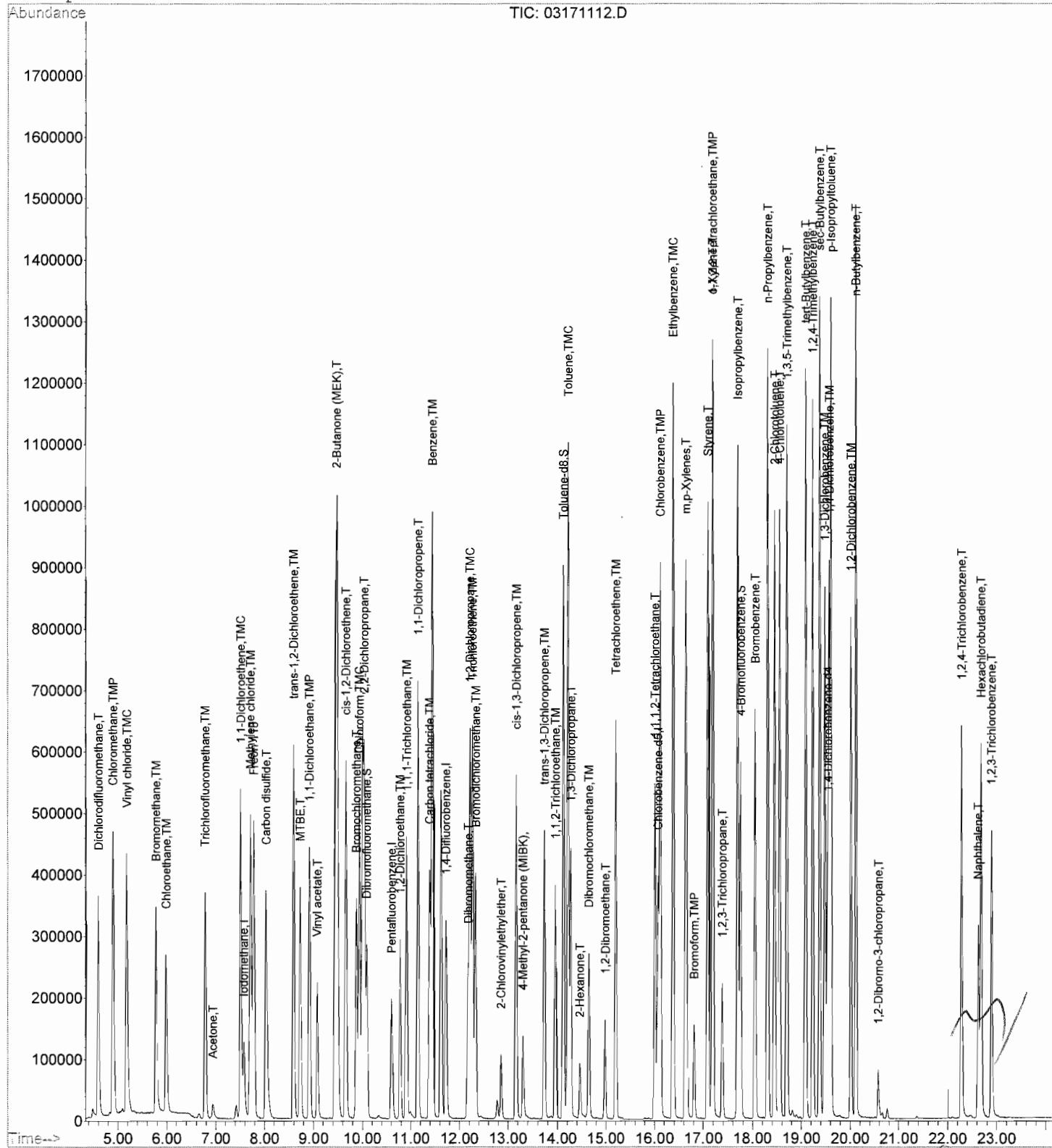
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	50.92	ug/L	# 94
44) Dibromochloromethane	14.65	129	168655	49.32	ug/L	98
45) 1,2-Dibromoethane	14.98	107	142279	49.83	ug/L	97
46) Tetrachloroethene	15.20	166	223148	49.50	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	48.47	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.83	ug/L	99
49) Ethylbenzene	16.38	91	1095906	49.25	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.30	ug/L	98
51) Styrene	17.10	104	602783	50.99	ug/L	99
52) o-Xylene	17.20	106	366193	48.33	ug/L	97
55) Bromoform	16.82	173	87491	52.11	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.02	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	50.24	ug/L	96
58) Isopropylbenzene	17.70	105	904235	50.93	ug/L	99
59) Bromobenzene	18.05	156	210716	51.44	ug/L	99
60) n-Propylbenzene	18.30	91	1279523	50.48	ug/L	100
61) 2-Chlorotoluene	18.45	91	736550	49.60	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.32	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.75	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	50.66	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	772492	50.09	ug/L	99
66) sec-Butylbenzene	19.38	105	1121222	50.08	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	414698	49.68	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	411367	48.95	ug/L	98
69) p-Isopropyltoluene	19.61	119	866615	50.64	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	49.55	ug/L	99
71) n-Butylbenzene	20.11	91	964633	50.65	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	49.85	ug/L	91
73) 1,2,4-Trichlorobenzene	22.28	180	240360	51.26	ug/L	99
74) Naphthalene	22.63	128	314469	50.58	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	50.29	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	192513	50.36	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
Acq On : 17 Mar 2011 12:17 pm Operator: LC  
Sample : 50 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Re Calc*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	425047	96.46	ug/L	0.00
Spiked Amount	25.000		Recovery	= 385.84%		
39) Toluene-d8	14.12	98	1505447	96.52	ug/L	0.00
Spiked Amount	25.000		Recovery	= 386.08%		
53) 4-Bromofluorobenzene	17.75	95	536695	97.52	ug/L	0.00
Spiked Amount	25.000		Recovery	= 390.08%		

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.60	85	779223	94.19 ug/L 98
3) Chloromethane	4.90	50	1431368	104.65 ug/L 99
4) Vinyl chloride	5.18	62	1228117	100.85 ug/L 100
5) Bromomethane	5.78	94	641424	100.36 ug/L 98
6) Chloroethane	5.98	64	584071	90.47 ug/L 100
7) Trichlorofluoromethane	6.78	101	698452	82.49 ug/L 98
8) Acetone	6.94	43	84316	88.94 ug/L 97
9) Iodomethane	7.58	142	393011	100.00 ug/L 99
10) 1,1-Dichloroethene	7.52	96	450680	91.25 ug/L 99
11) Methylene chloride	7.71	84	530536	91.30 ug/L 99
12) Freon 113	7.78	101	537890	91.98 ug/L 99
13) Carbon disulfide	8.04	76	1652598	94.04 ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.19 ug/L 96
15) MTBE	8.74	73	859812	92.07 ug/L 99
16) 1,1-Dichloroethane	8.93	63	1054794	92.52 ug/L 99
17) Vinyl acetate	9.08	43	827230	93.42 ug/L 99
18) 2-Butanone (MEK)	9.47	72	27904	99.26 ug/L 96
19) cis-1,2-Dichloroethene	9.66	96	527963	93.29 ug/L 99
20) Bromochloromethane	9.87	128	191014	92.23 ug/L 94
21) Chloroform	9.93	83	877382	93.27 ug/L 100
22) 2,2-Dichloropropane	10.04	77	739530	96.96 ug/L 99
24) 1,2-Dichloroethane	10.78	62	540824	94.21 ug/L 99
25) 1,1,1-Trichloroethane	10.91	97	659685	97.66 ug/L 98
27) 1,1-Dichloropropene	11.15	75	764611	96.58 ug/L 98
28) Carbon tetrachloride	11.39	117	547122	100.10 ug/L 100
29) Benzene	11.44	78	2051183	96.91 ug/L 99
30) Dibromomethane	12.17	93	236182	94.32 ug/L 99
31) 1,2-Dichloropropane	12.21	63	573859	97.07 ug/L 99
32) Trichloroethene	12.27	95	518186	97.91 ug/L 100
33) Bromodichloromethane	12.33	83	619726	99.74 ug/L 99
34) 2-Chlorovinylethylether	12.86	63	99299	94.85 ug/L 100
35) cis-1,3-Dichloropropene	13.17	75	755768	100.21 ug/L 100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	100.07 ug/L 99
37) trans-1,3-Dichloropropene	13.73	75	581943	99.98 ug/L 100
38) 1,1,2-Trichloroethane	13.95	83	272981	97.54 ug/L 99
40) Toluene	14.22	92	1181672	98.20 ug/L 98
42) 1,3-Dichloropropane	14.27	76	562918	99.07 ug/L 98

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031711.M Fri Mar 18 08:38:55 2011

*ML 9/11/11*  
*LC 03/18/11*

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

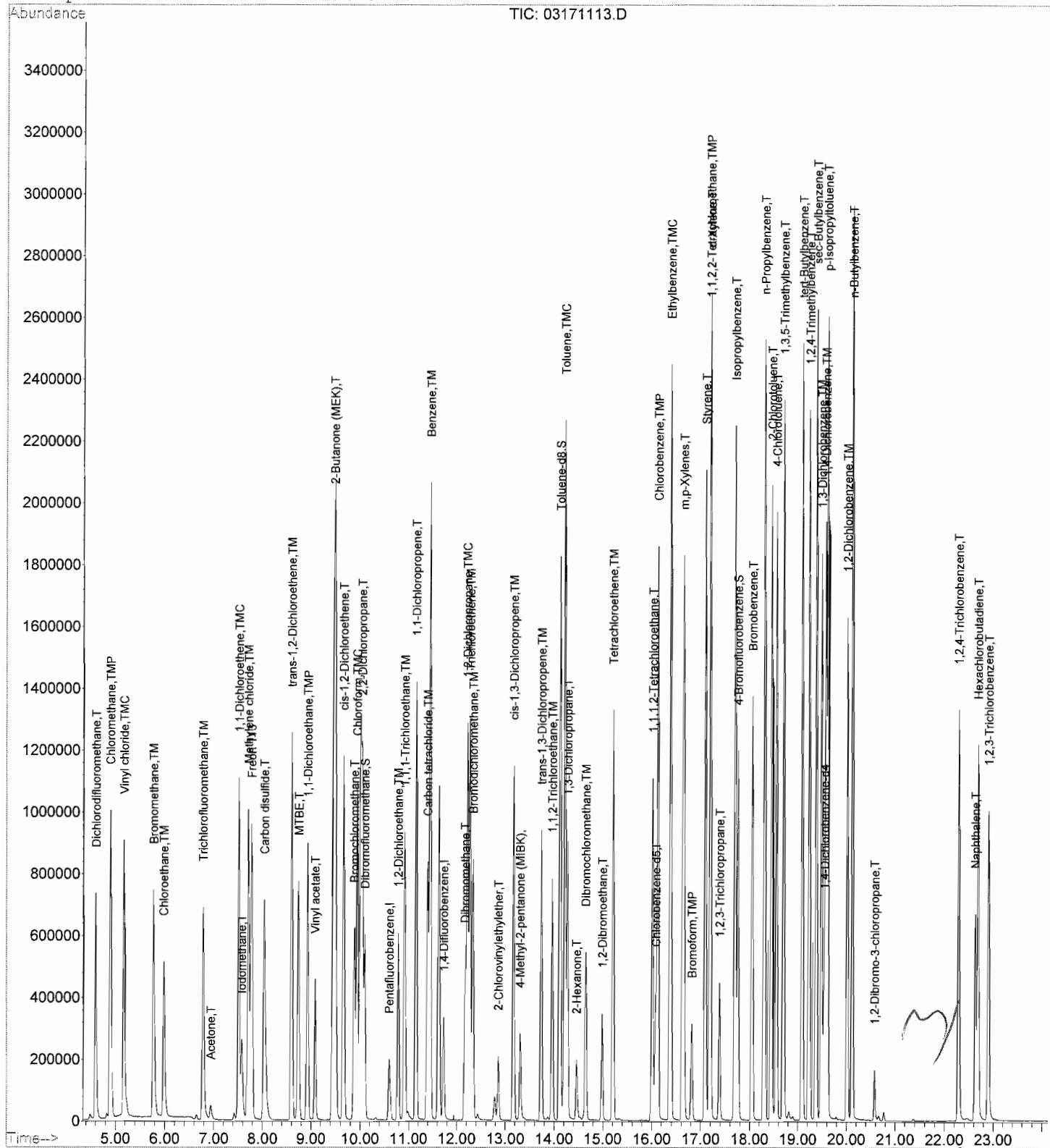
Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	107.35	ug/L #	96
44) Dibromochloromethane	14.65	129	341882	100.06	ug/L	98
45) 1,2-Dibromoethane	14.98	107	294156	103.12	ug/L	99
46) Tetrachloroethene	15.20	166	455622	101.17	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	100.03	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.85	ug/L	99
49) Ethylbenzene	16.38	91	2245318	100.99	ug/L	100
50) m,p-Xylenes	16.64	106	773283	99.30	ug/L	100
51) Styrene	17.10	104	1244691	105.39	ug/L	99
52) o-Xylene	17.20	106	750628	99.16	ug/L	97
55) Bromoform	16.82	173	182147	105.27	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.52	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	75618	99.33	ug/L	96
58) Isopropylbenzene	17.70	105	1844526	100.80	ug/L	100
59) Bromobenzene	18.05	156	429425	101.72	ug/L	99
60) n-Propylbenzene	18.30	91	2615929	100.14	ug/L	100
61) 2-Chlorotoluene	18.45	91	1500663	98.05	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.39	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	100.18	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	99.86	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	99.31	ug/L	99
66) sec-Butylbenzene	19.39	105	2280043	98.81	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	98.46	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.78	ug/L	98
69) p-Isopropyltoluene	19.61	119	1785874	101.26	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	97.71	ug/L	100
71) n-Butylbenzene	20.12	91	1981760	100.96	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	98.40	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	510699	105.68	ug/L	99
74) Naphthalene	22.63	128	678287	105.85	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	102.46	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	412634	104.74	ug/L	100

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Re Calc*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	839626	186.83	ug/L	0.00
Spiked Amount 25.000				Recovery =	747.32%	
39) Toluene-d8	14.12	98	3013932	192.60	ug/L	0.00
Spiked Amount 25.000				Recovery =	770.40%	
53) 4-Bromofluorobenzene	17.76	95	1038923	185.85	ug/L	0.00
Spiked Amount 25.000				Recovery =	743.40%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	1487523	176.30	ug/L	98
3) Chloromethane	4.90	50	2913054	208.82	ug/L	99
4) Vinyl chloride	5.16	62	2428967	195.57	ug/L	100
5) Bromomethane	5.78	94	1343422	205.83	ug/L	97
6) Chloroethane	5.98	64	1199344	182.14	ug/L	100
7) Trichlorofluoromethane	6.79	101	1701514	197.03	ug/L	99
8) Acetone	6.94	43	201529	213.75	ug/L	98
9) Iodomethane	7.58	142	794173	198.00	ug/L	98
10) 1,1-Dichloroethene	7.52	96	920511	182.74	ug/L	98
11) Methylene chloride	7.71	84	1063508	179.46	ug/L	97
12) Freon 113	7.78	101	1079115	180.94	ug/L	98
13) Carbon disulfide	8.03	76	3312605	184.83	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	185.90	ug/L	97
15) MTBE	8.74	73	1719756	180.56	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	181.08	ug/L	99
17) Vinyl acetate	9.08	43	1660788	183.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	57153	198.44	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	1073476	185.99	ug/L	98
20) Bromochloromethane	9.88	128	361702	171.24	ug/L	95
21) Chloroform	9.93	83	1746080	182.00	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	186.19	ug/L	98
24) 1,2-Dichloroethane	10.78	62	1056987	180.53	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	1325051	192.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	1539559	193.84	ug/L	99
28) Carbon tetrachloride	11.39	117	1092097	199.16	ug/L	100
29) Benzene	11.45	78	4061777	191.29	ug/L	99
30) Dibromomethane	12.17	93	461244	183.60	ug/L	98
31) 1,2-Dichloropropane	12.21	63	1126863	190.00	ug/L	100
32) Trichloroethene	12.27	95	1022222	192.52	ug/L	98
33) Bromodichloromethane	12.33	83	1217593	195.34	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	174106	166.89	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	197.58	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	195.44	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.66	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	536251	191.00	ug/L	100
40) Toluene	14.22	92	2368495	196.20	ug/L	98
42) 1,3-Dichloropropane	14.28	76	1107954	191.97	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031711.M Fri Mar 18 08:39:11 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

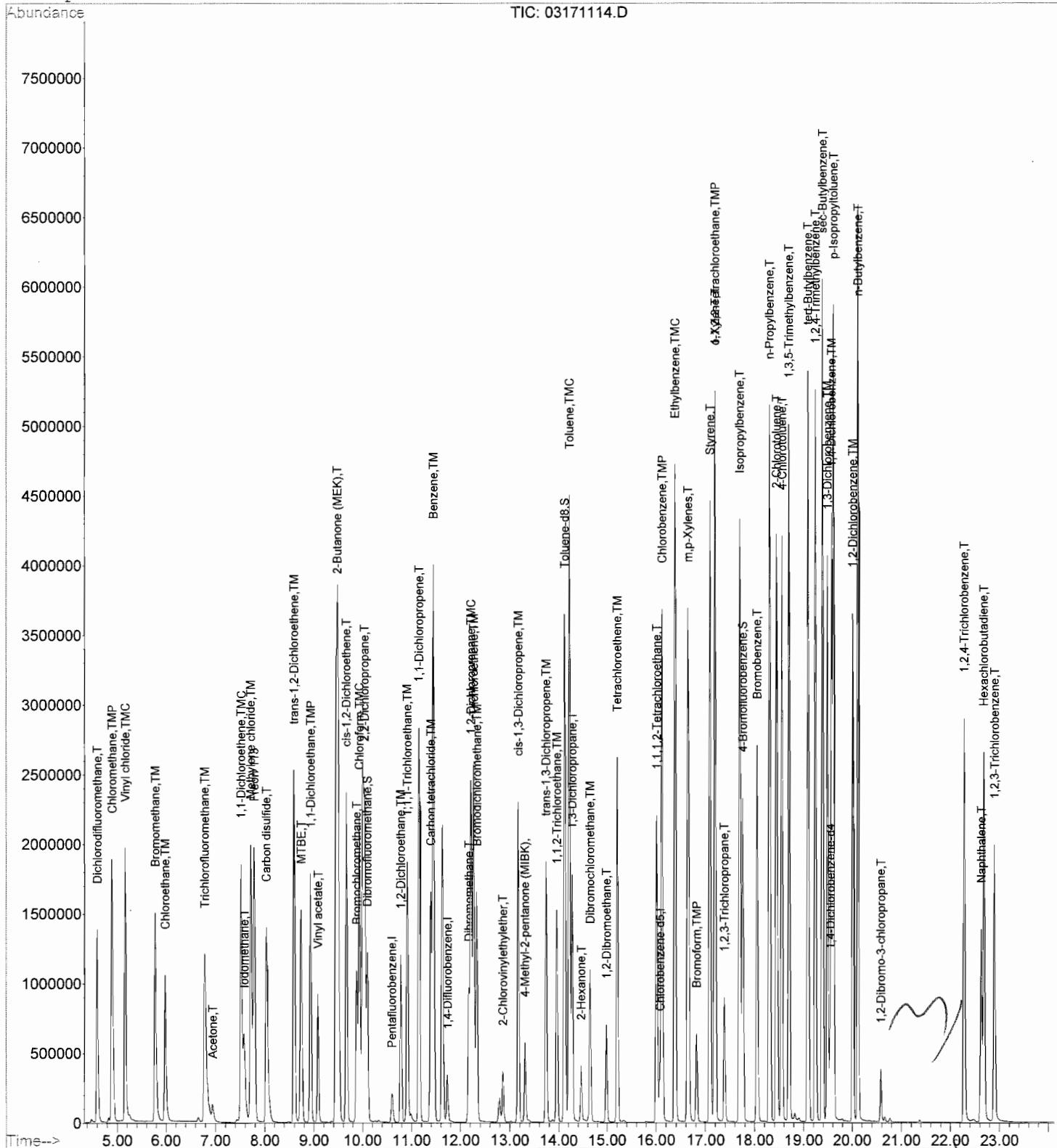
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	206.17	ug/L #	96
44) Dibromochloromethane	14.65	129	686033	197.67	ug/L	99
45) 1,2-Dibromoethane	14.99	107	575405	198.59	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.85	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	200.14	ug/L	96
48) Chlorobenzene	16.13	112	2393108	199.64	ug/L	97
49) Ethylbenzene	16.38	91	4465000	197.71	ug/L	99
50) m,p-Xylenes	16.64	106	1550944	196.07	ug/L	99
51) Styrene	17.10	104	2561762	213.54	ug/L	98
52) o-Xylene	17.20	106	1517247	197.33	ug/L	97
55) Bromoform	16.82	173	364089	184.76	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.71	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	155202	179.01	ug/L	97
58) Isopropylbenzene	17.70	105	3655213	175.39	ug/L	99
59) Bromobenzene	18.05	156	865850	180.09	ug/L	98
60) n-Propylbenzene	18.31	91	5305462	178.33	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	179.50	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.40	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	193.53	ug/L	98
64) tert-Butylbenzene	19.09	119	2997423	195.51	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	189.77	ug/L	98
66) sec-Butylbenzene	19.39	105	5038432	191.73	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	1885851	192.49	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.90	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	200.23	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	193.10	ug/L	99
71) n-Butylbenzene	20.12	91	4374192	195.66	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	192.76	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	201.28	ug/L	98
74) Naphthalene	22.63	128	1413680	193.70	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	195.85	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	830638	185.13	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
Acq On : 17 Mar 2011 1:19 pm Operator: LC  
Sample : 200 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration





## **ANALYTICAL DATA**

METHOD: 8260B

DATE: 03/16/2011

WORK ORDER: PUC0730

**ANALYTICAL DATA REVIEW CHECKLIST**

SOP PE-VOA-001 R.1

GC/MS Volatile Organic Analysis [ Method No. EPA 624 &amp; 8260B ]

Analysis Date:	Analyst:	Description		
		Yes	No	NA <sup>1</sup>
1. BFB (50 ng or less): Verify meets criteria every 12 hours		/		
2. Initial Calibration Curve (5 levels)				
- Date of Initial Calibration: 3/14/11		/		
- SPCCs must meet Min. RF		/		
- CCCs ≤ 30% RPD		/		
- All other compounds ≤ 15% RSD or use curve		/		
- Comments:		/		
- Second source within historical limits		/		
3. Continuing Calibration Check (every 12 hours)				
- SPCCs must meet Min. RF		/		
- CCCs ≤ 20% D		/		
- IS RT ± 30 secs		/		
- IS area -50% to +100%		/		
- All CCVs for reported analytes within historical limits		X	/	C
4. Method Blank				
- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)		/		
- All compounds of interest must be < Reporting Limit		/		
5. Laboratory Control Samples (LCS/LCSD)				
- Must be analyzed per 20 samples/per matrix/per batch		/		
- LCS/LCSD recoveries within historical limits		/		
- RPD ≤ 25%		/		R7
- Surrogates within historical limits		/		
6. MS/MSD				
- Must be analyzed per 20 samples/per matrix/per batch		/		
- MS/MSD recoveries within historical limits		/		MHT A
- RPD ≤ 25%		/		R2
- Surrogates within historical limits		/		
7. Samples				
- Analyzed within 14 days of sampling		/		
- IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL or CCV		/		
- Surrogate recoveries within historical limits		/		
- pH ≤ 2		/		
- If pH is not ≤ 2, flag data with P and pH Data Qualifier		/		✓
Comments:				

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: <u>Craig</u>	Date: 3/17/11
	Reviewer: <u> </u>	Date: 3/17/11

<sup>1</sup>) NA: Not Applicable

**Injection Log**

Directory: C:\HPCHEM\1\GCMS13\DATA\031611

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03161101.d	1.	BLK		16 Mar 2011 08:21
2	2	03161102.d	1.	BLK		16 Mar 2011 08:54
3	1	03161103.d	1.	TUNE		16 Mar 2011 09:22
4	1	03161104.d	1.	25 PPB CCV		16 Mar 2011 09:44
5	2	03161105.d	1.	20 PPB CCV		16 Mar 2011 10:17
6	3	03161106.d	1.	25 PPB CCV		16 Mar 2011 10:49
7	4	03161107.d	1.	11C0599-BS1		16 Mar 2011 11:46
8	5	03161108.d	1.	11C0599-BSD1		16 Mar 2011 12:18
9	6	03161109.d	1.	11C0599-MS1		16 Mar 2011 12:50
10	7	03161110.d	1.	11C0599-MSD1		16 Mar 2011 13:23
11	8	03161111.d	1.	BLK		16 Mar 2011 13:55
12	9	03161112.d	1.	11C0599-BLK1		16 Mar 2011 14:27
13	10	03161113.d	1.	PUC0636-04@TB		16 Mar 2011 14:59
14	11	03161114.d	1.	PUC0731-05@TB		16 Mar 2011 15:32
15	12	03161115.d	1.	PUC0923-01		16 Mar 2011 16:04
16	13	03161116.d	1.	PUC0924-01		16 Mar 2011 16:37
17	11	03161117.d	1.	PUC0928-01		16 Mar 2011 17:08
18	12	03161118.d	1.	PUC0636-01		16 Mar 2011 17:40
19	13	03161119.d	1.	PUC0731-04		16 Mar 2011 18:12
20	14	03161120.d	1.	PUC0636-03		16 Mar 2011 18:44
21	15	03161121.d	1.	PUC0730-01		16 Mar 2011 19:16
22	16	03161122.d	1.	PUC0731-01		16 Mar 2011 19:48
23	17	03161123.d	1.	PUC0731-02		16 Mar 2011 20:21
24	18	03161124.d	1.	PUC0731-03		16 Mar 2011 20:53 o/c
25	19	03161125.d	1.	PUC0636-02 -DNA Post cloc14		16 Mar 2011 21:25
26	20	03161126.d	1.	BLK		16 Mar 2011 21:57
27	21	03161127.d	1.	PUC0848-02@TB		16 Mar 2011 22:30
28	22	03161128.d	1.	PUC0848-01		16 Mar 2011 23:02
29	23	03161129.d	1.	PUC0987-01		16 Mar 2011 23:34
30	24	03161130.d	1.	PUC0987-02		17 Mar 2011 00:07
31	25	03161131.d	1.	PUC0987-03		17 Mar 2011 00:39
32	26	03161132.d	1.	PUC0987-04		17 Mar 2011 01:11
33	27	03161133.d	1.	PUC0987-05		17 Mar 2011 01:44 o/c

TestAmerica  
Phoenix

# GC/MS 13 DAILY LOG SUMMARY

DATE: 3-16-11

QC BATCH # (s): 11C0599

ANALYST: NL

SEQUENCE FILE: 031611.S

CALIBRATION METHOD(S): 031411.M

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
03161101	Blank	1x10ml	NA	8260	H <sub>2</sub> O		
02							
03	Tune	2ml				NA	
04	25 ppb CCV	1x10ml				H <sub>2</sub> O	DNU. Several complaints
05	20						
06	25						
07	11C0599 - BS1						
08	BSDI						
09	MSI			≤2			
10	MSDI			≤2			
11	Blank		NA				clean out.
12	11C0599 - BLK1						
13	PUC0636-04A (TB)			≤2			
14	0731-05 A			≤2			
15	0923-01 C			≤2			
16	0924-01 C			≤2			
17	0928-01 A			≤2			
18	0636-01 C			≤2			R12 @ 10X Benz.
19	0731-C4 A			≤2			
20	0636-03 D			≤2			R12 @ 10X B.T.X
21	0730-C1 A			≤2			R12 for possible c. o.
22	0731-01 A			≤2			
23	02 A			≤2			
24	03 A			≤2			
25	0636-02 D			≤2			Past clock. DNU. R12 @ 10X for Benz
26	Blank		NA				clean out
27	PUC0848-02 A (TB)			≤2	624		" "
28	L 01 A 14 <sup>th</sup> 16/11			≤2			
29	0987-01 D			≤2			
30	02 D			≤2			

## STANDARD ID NUMBERS

CCV/H20 LCS/H20 SPIKE: P001537

## REQUIRED REVIEWS

ARCHON REVIEWED

By / Date: NL 3/17/11

SEQUENCE REVIEWED

By / Date: NL 3/17/11

FINAL REVIEWER / Date: M/V/11/11

**TestAmerica  
Phoenix**

## **GC/MS 13 DAILY LOG SUMMARY**

**DATE:** 3/6/11 (con't)

**QC BATCH # (s) :**

**ANALYST:** \_\_\_\_\_

## **SEQUENCE FILE:**

**CALIBRATION METHOD(S):**

## **STANDARD ID NUMBERS**

CCV/H20 LCS/H20 SPIKE:

**CALIBRATION STD:**

#### **IS/Surrogate:**

REF.

LOT #:

## **REQUIRED REVIEWS**

## ARCHON REVIEWED

By / Date:

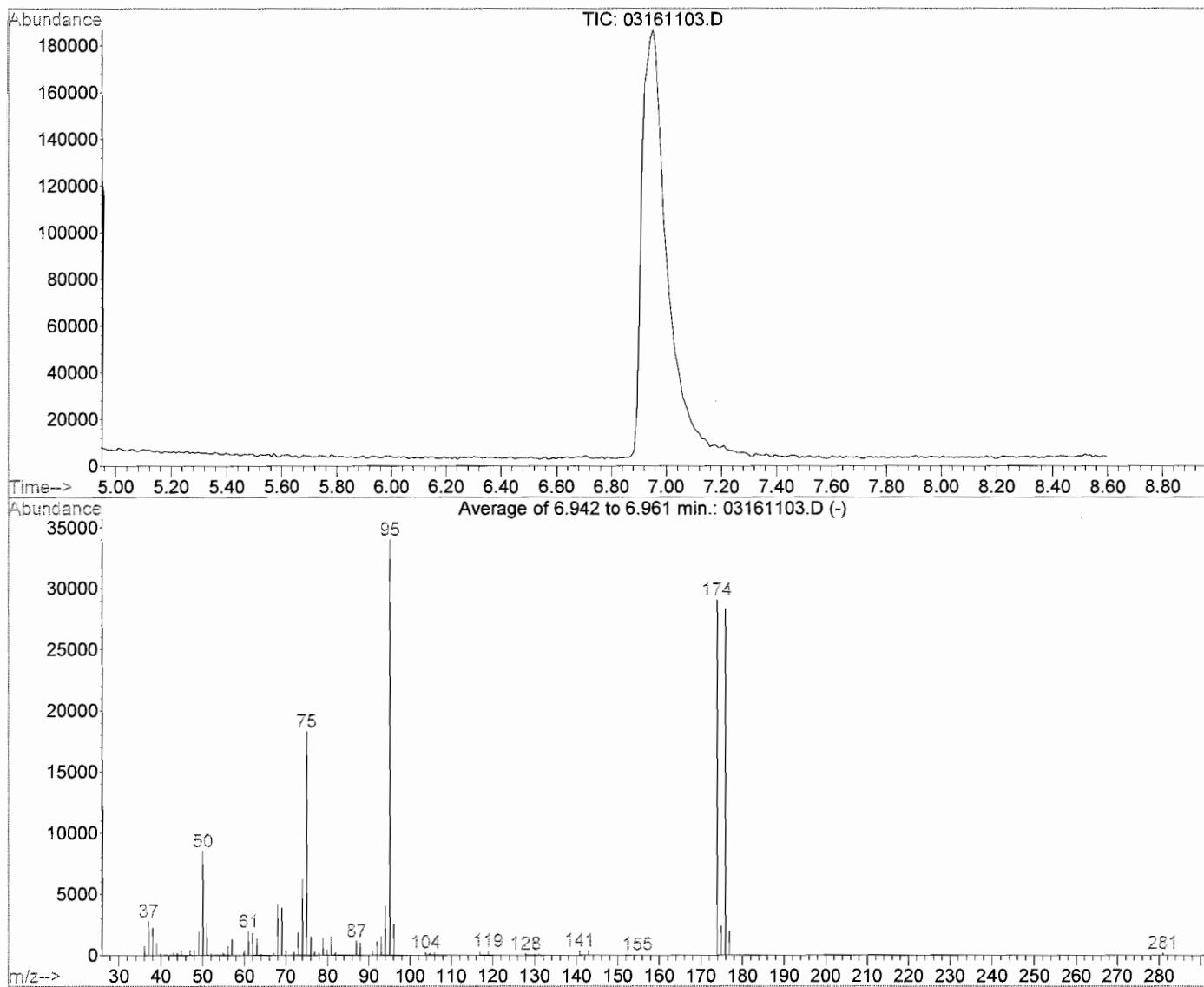
#### **SEQUENCE REVIEWED**

By / Date:

**FINAL REVIEWER / Date:**

## Method 8260

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161103.D Vial: 1  
 Acq On : 16 Mar 2011 9:22 am Operator: NL  
 Sample : TUNE Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260



Spectrum Information: Average of 6.942 to 6.961 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.1	8522	PASS
75	95	30	60	53.8	18280	PASS
95	95	100	100	100.0	33995	PASS
96	95	5	9	7.4	2500	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.4	29035	PASS
175	174	5	9	8.0	2332	PASS
176	174	95	101	97.6	28336	PASS
177	176	5	9	6.8	1935	PASS

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161104.D Vial: 1  
 Acq On : 16 Mar 2011 9:44 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:18 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	91840	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	597806	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	774536	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	698219	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	414375	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	300898	21.95	ug/L	0.00
Spiked Amount	25.000			Recovery	=	87.80%
46) Toluene-d8	13.99	98	815290	23.87	ug/L	0.00
Spiked Amount	25.000			Recovery	=	95.48%
60) 4-Bromofluorobenzene	17.62	95	424045	27.53	ug/L	0.00
Spiked Amount	25.000			Recovery	=	110.12%

## Target Compounds

					Qvalue
2) Ethanol	5.89	45	1407	38.44	ug/L # 37
3) tert-Butanol (TBA)	7.41	59	23149	46.16	ug/L # 82
5) Dichlorodifluoromethane	4.47	85	557133	25.44	ug/L 100
6) Chloromethane	4.77	50	292342	23.53	ug/L 100
7) Vinyl chloride	5.07	62	313359	23.58	ug/L 100
8) Bromomethane	5.66	94	207976	19.55	ug/L 92
9) Chloroethane	5.87	64	241120	21.29	ug/L 96
10) Trichlorofluoromethane	6.68	101	696403	25.53	ug/L 98
11) Acetone	6.83	43	103098	34.81	ug/L 95
12) Iodomethane	7.46	142	247591	19.29	ug/L 96
13) 1,1-Dichloroethene	7.41	96	296563	21.17	ug/L 94
14) Methylene chloride	7.59	84	326610	19.80	ug/L 95
15) Freon 113	7.66	101	412763	23.52	ug/L 99
16) Carbon disulfide	7.92	76	725982	18.64	ug/L 95
17) trans-1,2-Dichloroethene	8.49	96	317051	19.97	ug/L 94
18) MTBE	8.61	73	583904	20.48	ug/L 100
19) 1,1-Dichloroethane	8.81	63	634734	21.46	ug/L 100
20) Vinyl acetate	8.96	43	289985	21.19	ug/L 99
21) n-Hexane	9.32	86	66550	22.79	ug/L 99
22) 2-Butanone (MEK)	9.35	72	21527	27.29	ug/L # 27
23) Diisopropylether (DIPE)	9.36	45	1118330	20.70	ug/L 93
24) cis-1,2-dichloroethene	9.54	96	333355	19.59	ug/L 95
25) Bromochloromethane	9.76	128	119502	20.31	ug/L 98
26) Chloroform	9.81	83	695568	21.94	ug/L 98
27) 2,2-Dichloropropane	9.92	77	624196	24.49	ug/L 98
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	865583	21.11	ug/L 99
30) 1,2-Dichloroethane	10.65	62	453782	22.90	ug/L 98
31) 1,1,1-Trichloroethane	10.79	97	650007	23.43	ug/L 100
32) (TAME) tert-Amyl methyl eth	11.50	73	569871	19.90	ug/L 96
34) 1,1-Dichloropropene	11.03	75	469586	24.40	ug/L 98
35) Carbon tetrachloride	11.27	117	552813	27.14	ug/L 99
36) Benzene	11.32	78	1105819	22.79	ug/L 95
37) Dibromomethane	12.05	93	165565	23.20	ug/L 98
38) 1,2-Dichloropropane	12.09	63	269523	22.05	ug/L 92
39) Trichloroethene	12.14	95	357863	23.78	ug/L 98
40) Bromodichloromethane	12.21	83	461106	24.26	ug/L 99

(#) = qualifier out of range (m) = manual integration

03161104.D 031411.M Thu Mar 17 11:18:37 2011

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161104.D Vial: 1  
 Acq On : 16 Mar 2011 9:44 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:18 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

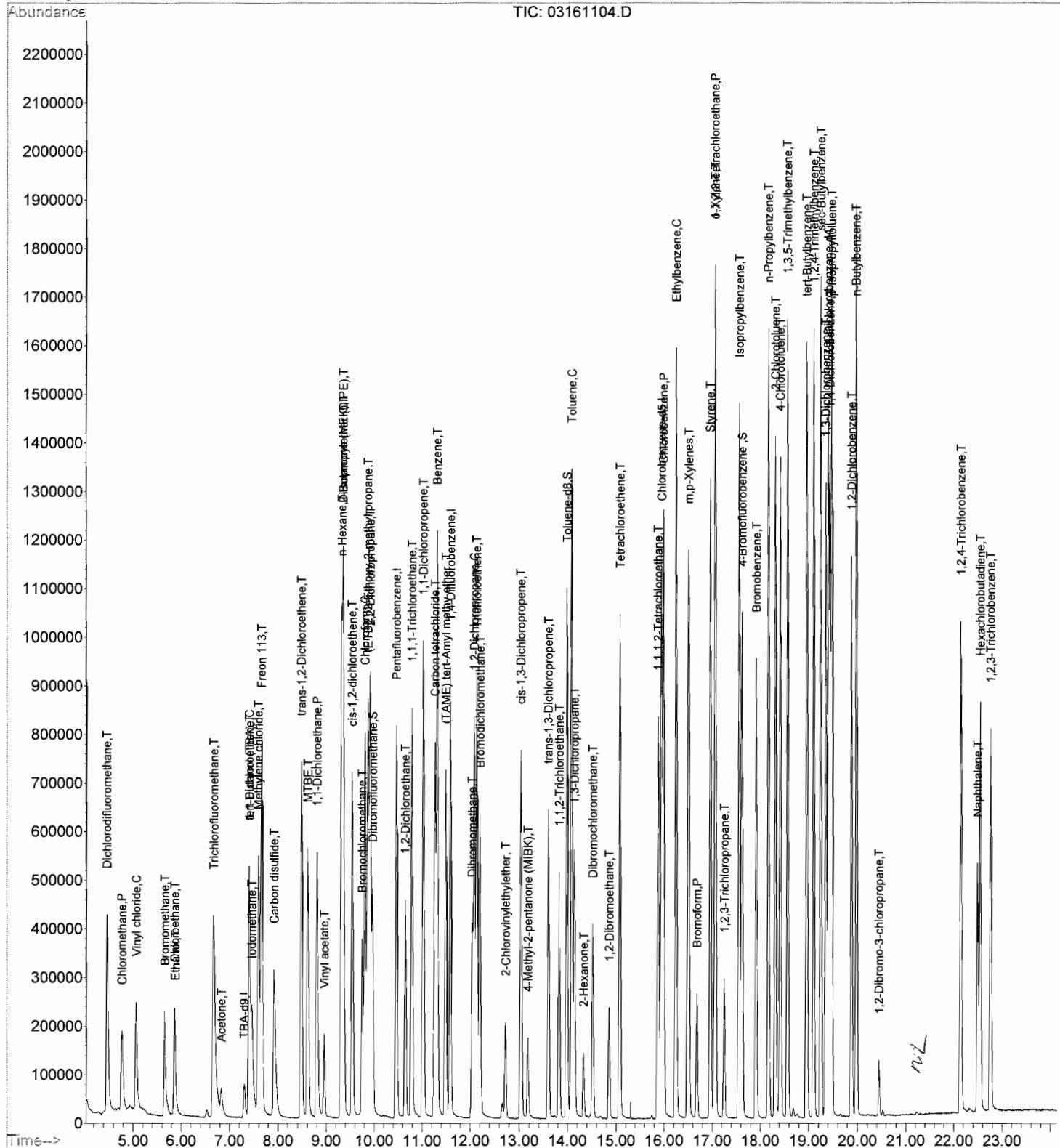
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	83108	20.77	ug/L	98
42) cis-1,3-Dichloropropene	13.03	75	431792	23.22	ug/L	92
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	140198	23.22	ug/L	98
44) trans-1,3-Dichloropropene	13.60	75	363667	23.77	ug/L	95
45) 1,1,2-Trichloroethane	13.83	97	180466	22.26	ug/L	96
47) Toluene	14.09	92	661371	22.43	ug/L	99
49) 1,3-Dichloropropane	14.14	76	311253	22.80	ug/L	100
50) 2-Hexanone	14.33	43	123510	28.81	ug/L	94
51) Dibromochloromethane	14.52	129	244251	22.60	ug/L	97
52) 1,2-Dibromoethane	14.86	107	182776	22.19	ug/L	99
53) Tetrachloroethene	15.08	164	285725	23.46	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.89	131	280394	22.48	ug/L	97
55) Chlorobenzene	15.99	112	716109	22.33	ug/L	97
56) Ethylbenzene	16.25	91	1355848	23.63	ug/L	99
57) m,p-Xylenes	16.51	106	457501	22.63	ug/L	96
58) Styrene	16.97	104	718109	23.39	ug/L	97
59) o-Xylene	17.07	106	456981	25.66	ug/L	99
62) Bromoform	16.69	173	146581	19.83	ug/L	98
63) 1,1,2,2-Tetrachloroethane	17.05	83	165854	20.72	ug/L	99
64) 1,2,3-Trichloropropene	17.25	110	51843	22.31	ug/L	96
65) Isopropylbenzene	17.57	105	1229816	23.11	ug/L	99
66) Bromobenzene	17.92	156	315524	21.44	ug/L	100
67) n-Propylbenzene	18.17	91	1556965	22.58	ug/L	100
68) 2-Chlorotoluene	18.32	91	993967	22.84	ug/L	96
69) 4-Chlorotoluene	18.42	91	989763	22.38	ug/L	98
70) 1,3,5-Trimethylbenzene	18.57	105	1109429	23.25	ug/L	98
71) tert-Butylbenzene	18.97	119	864509	22.27	ug/L	96
72) 1,2,4-Trimethylbenzene	19.11	105	1105772	23.12	ug/L	98
73) sec-Butylbenzene	19.25	105	1408209	23.02	ug/L	99
74) 1,3-Dichlorobenzene	19.35	146	560220	21.24	ug/L	98
75) 1,4-Dichlorobenzene	19.44	146	561466	21.29	ug/L	99
76) p-Isopropyltoluene	19.48	119	1141559	23.13	ug/L	98
77) 1,2-Dichlorobenzene	19.89	146	493650	21.40	ug/L	98
78) n-Butylbenzene	19.98	91	1174988	23.71	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.44	75	30344	20.93	ug/L	93
80) 1,2,4-Trichlorobenzene	22.16	180	429530	22.95	ug/L	99
81) Naphthalene	22.49	128	475252	21.79	ug/L	98
82) Hexachlorobutadiene	22.55	225	241749	24.48	ug/L	99
83) 1,2,3-Trichlorobenzene	22.76	180	335294	22.35	ug/L	99

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161104.D Vial: 1  
 Acq On : 16 Mar 2011 9:44 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:18 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161105.D Vial: 2  
 Acq On : 16 Mar 2011 10:17 am Operator: NL  
 Sample : 20 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 10:46 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	85901	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	610941	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	760541	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	720726	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	412739	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	301614	21.53	ug/L	0.00
Spiked Amount	25.000		Recovery	=	86.12%	
46) Toluene-d8	13.99	98	830709	24.77	ug/L	0.00
Spiked Amount	25.000		Recovery	=	99.08%	
60) 4-Bromofluorobenzene	17.62	95	424805	26.72	ug/L	0.00
Spiked Amount	25.000		Recovery	=	106.88%	

## Target Compounds

					Qvalue
2) Ethanol	5.91	45	755	22.05	ug/L
3) tert-Butanol (TBA)	7.41	59	21783	46.47	ug/L #
5) Dichlorodifluoromethane	4.48	85	459226	20.52	ug/L 100
6) Chloromethane	4.78	50	241369	19.01	ug/L 99
7) Vinyl chloride	5.07	62	264277	19.46	ug/L 98
8) Bromomethane	5.66	94	173101	16.17	ug/L 93
9) Chloroethane	5.88	64	203689	17.60	ug/L 96
10) Trichlorofluoromethane	6.69	101	564629	20.26	ug/L 98
11) Acetone	6.83	43	83766	27.67	ug/L 99
12) Iodomethane	7.46	142	200095	15.63	ug/L 97
13) 1,1-Dichloroethene	7.41	96	243989	17.04	ug/L 91
14) Methylene chloride	7.60	84	276435	16.39	ug/L 98
15) Freon 113	7.66	101	339648	18.94	ug/L 98
16) Carbon disulfide	7.93	76	637350	16.01	ug/L 96
17) trans-1,2-Dichloroethene	8.48	96	272745	16.81	ug/L 96
18) MTBE	8.62	73	483572	16.60	ug/L 99
19) 1,1-Dichloroethane	8.81	63	531618	17.59	ug/L 99
20) Vinyl acetate	8.96	43	218408	15.62	ug/L 98
21) n-Hexane	9.33	86	52678	17.65	ug/L 91
22) 2-Butanone (MEK)	9.34	72	18163	22.53	ug/L # 1
23) Diisopropylether (DIPE)	9.36	45	956933	17.34	ug/L 95
24) cis-1,2-dichloroethene	9.55	96	284869	16.38	ug/L 94
25) Bromochloromethane	9.76	128	99250	16.51	ug/L 99
26) Chloroform	9.82	83	585568	18.07	ug/L 97
27) 2,2-Dichloropropane	9.92	77	503335	19.32	ug/L 99
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	722513	17.24	ug/L 98
30) 1,2-Dichloroethane	10.66	62	376603	18.59	ug/L 99
31) 1,1,1-Trichloroethane	10.79	97	547082	19.29	ug/L 99
32) (TAME) tert-Amyl methyl eth	11.50	73	483672	16.53	ug/L 97
34) 1,1-Dichloropropene	11.03	75	395297	20.92	ug/L 99
35) Carbon tetrachloride	11.27	117	457726	22.88	ug/L 100
36) Benzene	11.32	78	953667	20.02	ug/L 96
37) Dibromomethane	12.04	93	136600	19.49	ug/L 99
38) 1,2-Dichloropropene	12.09	63	232551	19.37	ug/L 95
39) Trichloroethene	12.14	95	302510	20.47	ug/L 99
40) Bromodichloromethane	12.20	83	382602	20.50	ug/L 100

(#) = qualifier out of range (m) = manual integration

03161105.D 031411.M Thu Mar 17 11:18:44 2011

Page 1

M5/11/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161105.D Vial: 2  
 Acq On : 16 Mar 2011 10:17 am Operator: NL  
 Sample : 20 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 10:46 2011 Quant Results File: 031411.RES

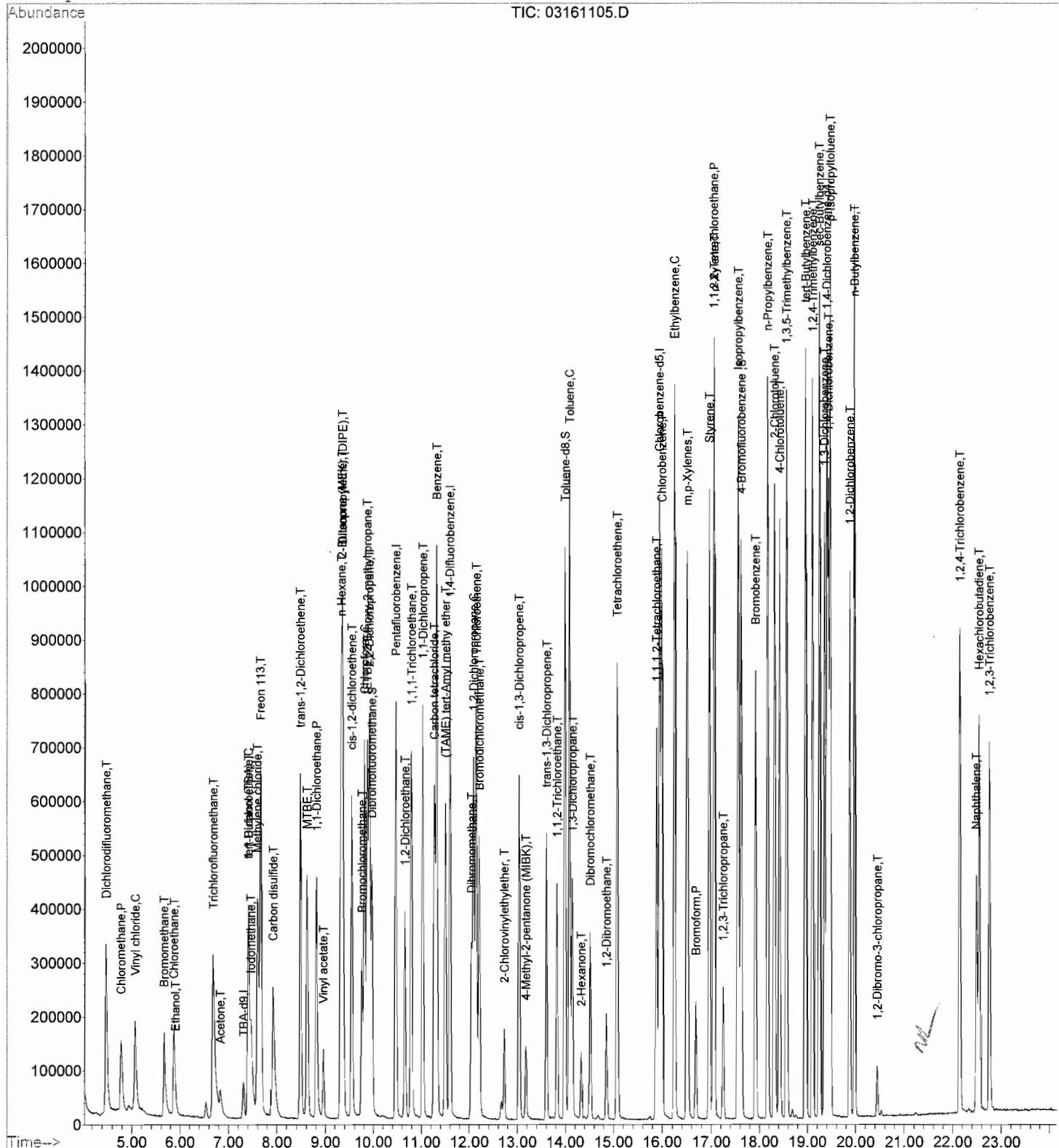
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	69392	17.66	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	364172	19.94	ug/L	94
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	120394	20.31	ug/L	98
44) trans-1,3-Dichloropropene	13.60	75	305963	20.37	ug/L	96
45) 1,1,2-Trichloroethane	13.82	97	152268	19.13	ug/L	97
47) Toluene	14.09	92	581424	20.08	ug/L	100
49) 1,3-Dichloropropane	14.14	76	259317	18.40	ug/L	98
50) 2-Hexanone	14.33	43	106375	24.04	ug/L	98
51) Dibromochloromethane	14.52	129	209130	18.75	ug/L	99
52) 1,2-Dibromoethane	14.85	107	157062	18.48	ug/L	97
53) Tetrachloroethene	15.08	164	242330	19.27	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	238555	18.53	ug/L	99
55) Chlorobenzene	15.99	112	622733	18.81	ug/L	96
56) Ethylbenzene	16.25	91	1182639	19.97	ug/L	99
57) m,p-Xylenes	16.51	106	405238	19.42	ug/L	97
58) Styrene	16.96	104	633473	19.99	ug/L	98
59) o-Xylene	17.06	106	391434	21.20	ug/L	98
62) Bromoform	16.68	173	123316	16.75	ug/L	99
63) 1,1,2,2-Tetrachloroethane	17.05	83	141635	17.76	ug/L	100
64) 1,2,3-Trichloropropene	17.25	110	41919	18.11	ug/L	97
65) Isopropylbenzene	17.56	105	1046110	19.73	ug/L	100
66) Bromobenzene	17.92	156	277342	18.92	ug/L	97
67) n-Propylbenzene	18.17	91	1337804	19.48	ug/L	100
68) 2-Chlorotoluene	18.31	91	831077	19.17	ug/L	98
69) 4-Chlorotoluene	18.42	91	848365	19.25	ug/L	97
70) 1,3,5-Trimethylbenzene	18.57	105	945432	19.89	ug/L	99
71) tert-Butylbenzene	18.96	119	767400	19.84	ug/L	97
72) 1,2,4-Trimethylbenzene	19.11	105	920003	19.31	ug/L	98
73) sec-Butylbenzene	19.25	105	1202769	19.74	ug/L	100
74) 1,3-Dichlorobenzene	19.35	146	484399	18.44	ug/L	98
75) 1,4-Dichlorobenzene	19.44	146	482436	18.37	ug/L	99
76) p-Isopropyltoluene	19.48	119	966316	19.66	ug/L	99
77) 1,2-Dichlorobenzene	19.88	146	424884	18.49	ug/L	97
78) n-Butylbenzene	19.98	91	1003280	20.32	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.44	75	27093	18.76	ug/L	85
80) 1,2,4-Trichlorobenzene	22.15	180	367610	19.72	ug/L	98
81) Naphthalene	22.49	128	418661	19.27	ug/L	98
82) Hexachlorobutadiene	22.55	225	208265	21.17	ug/L	99
83) 1,2,3-Trichlorobenzene	22.76	180	293170	19.62	ug/L	100

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161105.D Vial: 2  
Acq On : 16 Mar 2011 10:17 am Operator: NL  
Sample : 20 PPB CCV Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 16 10:46 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



**624-20ppbCCV**

**Data File Name** 03161105.D  
**Data File Path** C:\HPCHEM\1\GCMS13\DATA\031611\  
**Operator** NL  
**Date Acquired** 3/16/2011 10:17  
**Acq. Method File** 8260B  
**Sample Name** 20 PPB CCV  
**Instrument Name** GCMS13

Name	Target Response	ICAL Response	Low	High	T/F
TBA-d9	85901	125792	62896	251584	TRUE
Pentafluorobenzene	610941	699455	349727.5	1398910	TRUE
1,4-Difluorobenzene	760541	1014981	507490.5	2029962	TRUE
Chlorobenzene-d5	720726	936018	468009	1872036	TRUE
1,4-Dichlorobenzene-d4	412739	492554	246277	985108	TRUE

Name	Amount	Spike Amount	% REC	Low	High	T/F
Ethanol	22.05	200	11.03	80	140	FALSE NT
tert-Butanol (TBA)	46.47	100	46.47	80	120	FALSE L
Dichlorodifluoromethane	20.52	20	102.59	60	150	TRUE
Chloromethane	19.01	20	95.04	0	204	TRUE
Vinyl chloride	19.46	20	97.31	4	196	TRUE
Bromomethane	16.17	20	80.85	14	186	TRUE
Chloroethane	17.60	20	87.98	38	162	TRUE
Trichlorofluoromethane	20.26	20	101.28	48	152	TRUE
Acetone	27.67	20	138.36	10	150	TRUE
Iodomethane	15.63	20	78.14	70	140	TRUE
1,1-Dichloroethene	17.04	20	85.22	50	150	TRUE
Methylene chloride	16.39	20	81.97	60	140	TRUE
Freon 113	18.94	20	94.70	60	140	TRUE
Carbon disulfide	16.01	20	80.07	70	130	TRUE
trans-1,2-Dichloroethene	16.81	20	84.06	70	130	TRUE
MTBE	16.60	20	83.00	70	130	TRUE
1,1-Dichloroethane	17.59	20	87.93	72	128	TRUE
Vinyl acetate	15.62	20	78.09	40	150	TRUE
n-Hexane	17.65	20	88.26	70	130	TRUE
2-Butanone (MEK)	22.53	20	112.66	40	150	TRUE
Diisopropylether (DIPE)	17.34	20	86.68	80	130	TRUE
cis-1,2-dichloroethene	16.38	20	81.90	80	120	TRUE
Bromochloromethane	16.51	20	82.54	80	120	TRUE
Chloroform	18.07	20	90.37	68	132	TRUE
2,2-Dichloropropane	19.32	20	96.62	80	130	TRUE
(ETBE) 2-Ethoxy-2-methyl propane	17.24	20	86.19	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>21.53</b>	<b>25</b>	<b>86.13</b>	<b>80</b>	<b>135</b>	<b>TRUE</b>
1,2-Dichloroethane	18.59	20	92.97	68	132	TRUE
1,1,1-Trichloroethane	19.29	20	96.47	75	125	TRUE
(TAME) tert-Amyl methy ether	16.53	20	82.63	80	130	TRUE
1,1-Dichloropropene	20.92	20	104.58	80	120	TRUE
Carbon tetrachloride	22.88	20	114.42	73	127	TRUE
Benzene	20.02	20	100.10	64	136	TRUE
Dibromomethane	19.49	20	97.45	80	120	TRUE
1,2-Dichloropropane	19.37	20	96.86	34	166	TRUE
Trichloroethene	20.47	20	102.37	66	133	TRUE

Bromodichloromethane	20.50	20	102.49	66	134	TRUE
2-Chlorovinylethylether	17.66	20	88.30	0	224	TRUE
cis-1,3-Dichloropropene	19.94	20	99.71	24	176	TRUE
4-Methyl-2-pentanone (MIBK)	20.31	20	101.54	60	130	TRUE
trans-1,3-Dichloropropene	20.37	20	101.83	50	150	TRUE
1,1,2-Trichloroethane	19.13	20	95.63	71	129	TRUE
Toluene-d8	24.77	25	99.06	80	125	TRUE
Toluene	20.08	20	100.41	74	126	TRUE
1,3-Dichloropropane	18.40	20	92.00	80	120	TRUE
2-Hexanone	24.04	20	120.20	20	150	TRUE
Dibromochloromethane	18.75	20	93.75	68	132	TRUE
1,2-Dibromoethane	18.48	20	92.38	80	120	TRUE
Tetrachloroethene	19.27	20	96.36	74	126	TRUE
1,1,1,2-Tetrachloroethane	18.53	20	92.64	80	120	TRUE
Chlorobenzene	18.81	20	94.07	66	134	TRUE
Ethylbenzene	19.97	20	99.85	59	141	TRUE
m,p-Xylenes	19.42	20	97.11	60	140	TRUE
Styrene	19.99	20	99.94	80	120	TRUE
o-Xylene	21.20	20	106.00	80	120	TRUE
4-Bromofluorobenzene	26.72	25	106.88	75	125	TRUE
Bromoform	16.75	20	83.76	71	129	TRUE
1,1,2,2-Tetrachloroethane	17.76	20	88.81	60	140	TRUE
1,2,3-Trichloropropane	18.11	20	90.57	70	130	TRUE
Isopropylbenzene	19.73	20	98.66	80	130	TRUE
Bromobenzene	18.92	20	94.59	80	120	TRUE
n-Propylbenzene	19.48	20	97.39	75	130	TRUE
2-Chlorotoluene	19.17	20	95.85	80	120	TRUE
4-Chlorotoluene	19.25	20	96.27	80	120	TRUE
1,3,5-Trimethylbenzene	19.89	20	99.44	80	130	TRUE
tert-Butylbenzene	19.84	20	99.22	80	120	TRUE
1,2,4-Trimethylbenzene	19.31	20	96.56	80	120	TRUE
sec-Butylbenzene	19.74	20	98.71	80	120	TRUE
1,3-Dichlorobenzene	18.44	20	92.21	73	127	TRUE
1,4-Dichlorobenzene	18.37	20	91.83	63	137	TRUE
p-Isopropyltoluene	19.66	20	98.28	80	130	TRUE
1,2-Dichlorobenzene	18.49	20	92.45	63	137	TRUE
n-Butylbenzene	20.32	20	101.62	80	130	TRUE
1,2-Dibromo-3-chloropropane	18.76	20	93.79	50	150	TRUE
1,2,4-Trichlorobenzene	19.72	20	98.59	50	150	TRUE
Naphthalene	19.27	20	96.35	40	150	TRUE
Hexachlorobutadiene	21.17	20	105.85	40	150	TRUE
1,2,3-Trichlorobenzene	19.62	20	98.08	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161106.D Vial: 3  
 Acq On : 16 Mar 2011 10:49 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 11:12 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.31	65	93862	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	612219	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	804172	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	745719	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	430750	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	310914	22.15	ug/L	0.00
Spiked Amount	25.000		Recovery	=	88.60%	
46) Toluene-d8	13.99	98	881390	24.85	ug/L	0.00
Spiked Amount	25.000		Recovery	=	99.40%	
60) 4-Bromofluorobenzene	17.62	95	439227	26.70	ug/L	0.00
Spiked Amount	25.000		Recovery	=	106.80%	

## Target Compounds

				Qvalue	
2) Ethanol	5.90	45	617	16.49	ug/L
3) tert-Butanol (TBA)	7.41	59	26239	51.74	ug/L #
5) Dichlorodifluoromethane	4.48	85	580623	25.89	ug/L 100
6) Chloromethane	4.78	50	311017	24.44	ug/L 97
7) Vinyl chloride	5.07	62	337775	24.82	ug/L 97
8) Bromomethane	5.66	94	236811	21.57	ug/L 96
9) Chloroethane	5.87	64	254792	21.96	ug/L 97
10) Trichlorofluoromethane	6.68	101	719832	25.77	ug/L 97
11) Acetone	6.83	43	114605	37.78	ug/L 97
12) Iodomethane	7.46	142	291162	21.89	ug/L 97
13) 1,1-Dichloroethene	7.41	96	323127	22.53	ug/L 95
14) Methylene chloride	7.59	84	359694	21.29	ug/L 98
15) Freon 113	7.66	101	442723	24.64	ug/L 99
16) Carbon disulfide	7.92	76	821352	20.59	ug/L 97
17) trans-1,2-Dichloroethene	8.49	96	355305	21.86	ug/L 95
18) MTBE	8.62	73	623555	21.36	ug/L 99
19) 1,1-Dichloroethane	8.81	63	694368	22.92	ug/L 100
20) Vinyl acetate	8.95	43	286863	20.47	ug/L 99
21) n-Hexane	9.32	86	68048	22.75	ug/L 92
22) 2-Butanone (MEK)	9.34	72	22736	28.15	ug/L # 1
23) Diisopropylether (DIPE)	9.36	45	1211448	21.90	ug/L 95
24) cis-1,2-dichloroethene	9.54	96	380225	21.82	ug/L 97
25) Bromochloromethane	9.75	128	126952	21.07	ug/L 100
26) Chloroform	9.81	83	744882	22.94	ug/L 99
27) 2,2-Dichloropropane	9.92	77	646163	24.75	ug/L 97
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	913469	21.75	ug/L 99
30) 1,2-Dichloroethane	10.66	62	472598	23.29	ug/L 99
31) 1,1,1-Trichloroethane	10.79	97	694808	24.45	ug/L 99
32) (TAME) tert-Amyl methyl eth	11.50	73	628622	21.43	ug/L 97
34) 1,1-Dichloropropene	11.03	75	507735	25.41	ug/L 98
35) Carbon tetrachloride	11.26	117	593407	28.06	ug/L 100
36) Benzene	11.32	78	1251716	24.85	ug/L 98
37) Dibromomethane	12.05	93	174133	23.50	ug/L 99
38) 1,2-Dichloropropane	12.09	63	294906	23.23	ug/L 95
39) Trichloroethene	12.14	95	393735	25.20	ug/L 98
40) Bromodichloromethane	12.20	83	496725	25.17	ug/L 99

(#) = qualifier out of range (m) = manual integration

03161106.D 031411.M Thu Mar 17 11:19:29 2011

5/17/11

Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161106.D Vial: 3  
 Acq On : 16 Mar 2011 10:49 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 11:12 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

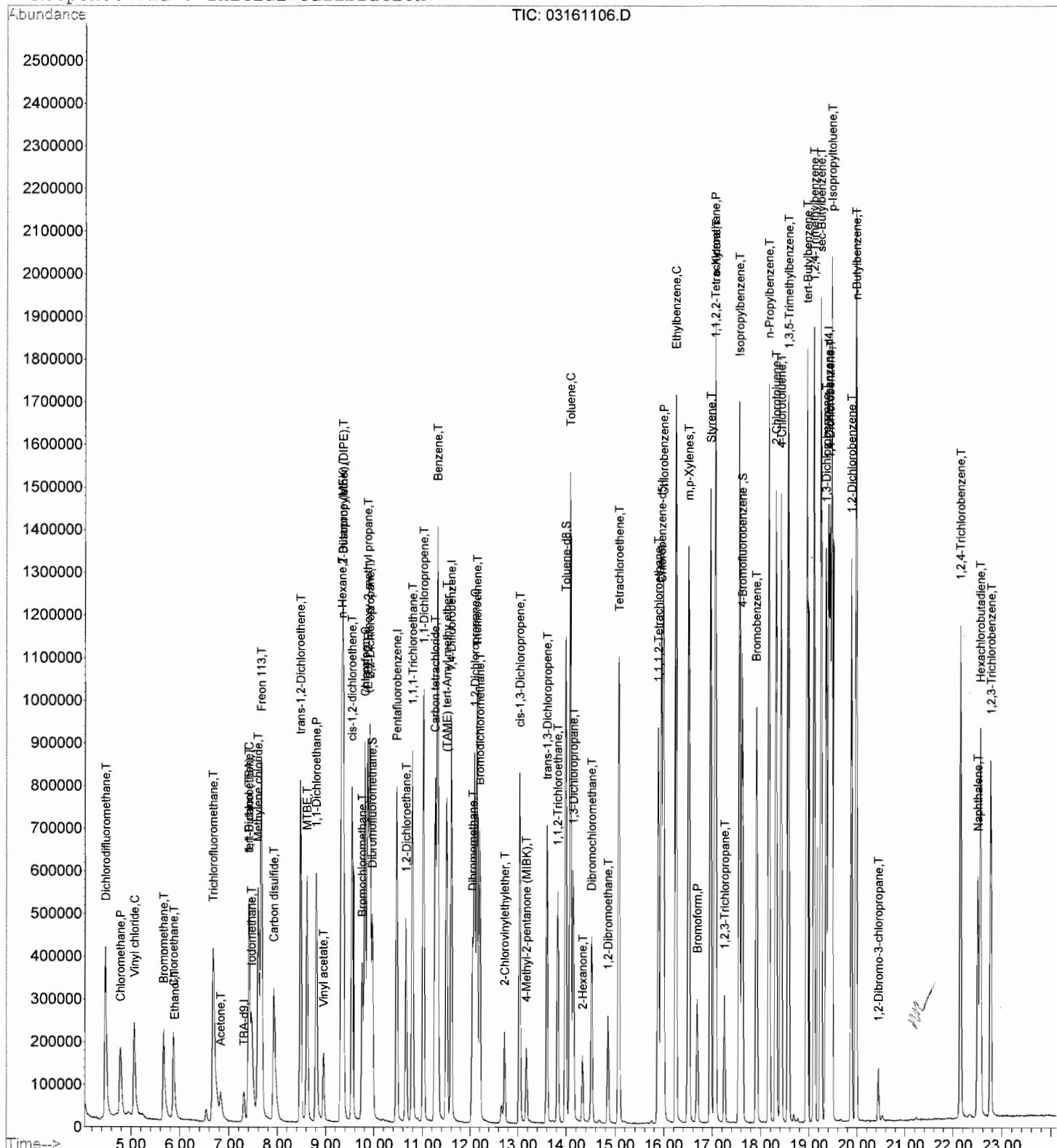
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.72	63	89492	21.54	ug/L	96
42) cis-1,3-Dichloropropene	13.04	75	470588	24.37	ug/L	94
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	153265	24.45	ug/L	99
44) trans-1,3-Dichloropropene	13.60	75	395855	24.92	ug/L	96
45) 1,1,2-Trichloroethane	13.82	97	198677	23.60	ug/L	98
47) Toluene	14.08	92	726813	23.74	ug/L	98
49) 1,3-Dichloropropane	14.14	76	337420	23.14	ug/L	98
50) 2-Hexanone	14.33	43	135682	29.63	ug/L	98
51) Dibromochloromethane	14.51	129	272790	23.64	ug/L	99
52) 1,2-Dibromoethane	14.85	107	200080	22.75	ug/L	99
53) Tetrachloroethene	15.08	164	318813	24.51	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	305179	22.91	ug/L	98
55) Chlorobenzene	15.99	112	813055	23.74	ug/L	99
56) Ethylbenzene	16.24	91	1524635	24.88	ug/L	99
57) m,p-Xylenes	16.51	106	528409	24.48	ug/L	98
58) Styrene	16.96	104	806757	24.60	ug/L	98
59) o-Xylene	17.06	106	502914	26.46	ug/L	99
62) Bromoform	16.68	173	165520	21.55	ug/L	97
63) 1,1,2,2-Tetrachloroethane	17.05	83	179137	21.53	ug/L	99
64) 1,2,3-Trichloropropene	17.26	110	53245	22.05	ug/L	96
65) Isopropylbenzene	17.56	105	1327943	24.00	ug/L	99
66) Bromobenzene	17.92	156	342351	22.38	ug/L	98
67) n-Propylbenzene	18.17	91	1703215	23.76	ug/L	100
68) 2-Chlorotoluene	18.31	91	1062815	23.49	ug/L	97
69) 4-Chlorotoluene	18.42	91	1081076	23.51	ug/L	98
70) 1,3,5-Trimethylbenzene	18.57	105	1187285	23.93	ug/L	99
71) tert-Butylbenzene	18.96	119	950071	23.54	ug/L	97
72) 1,2,4-Trimethylbenzene	19.10	105	1208005	24.30	ug/L	98
73) sec-Butylbenzene	19.25	105	1516992	23.86	ug/L	99
74) 1,3-Dichlorobenzene	19.36	146	612363	22.34	ug/L	99
75) 1,4-Dichlorobenzene	19.44	146	618984	22.58	ug/L	100
76) p-Isopropyltoluene	19.48	119	1232648	24.03	ug/L	98
77) 1,2-Dichlorobenzene	19.88	146	550282	22.95	ug/L	99
78) n-Butylbenzene	19.98	91	1265550	24.56	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.45	75	33317	22.10	ug/L	90
80) 1,2,4-Trichlorobenzene	22.15	180	466702	23.99	ug/L	98
81) Naphthalene	22.50	128	535132	23.60	ug/L	100
82) Hexachlorobutadiene	22.55	225	258975	25.22	ug/L	100
83) 1,2,3-Trichlorobenzene	22.77	180	369205	23.67	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03161106.D 031411.M Thu Mar 17 11:19:29 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161106.D Vial: 3  
 Acq On : 16 Mar 2011 10:49 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 11:12 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161106.D Vial: 3  
 Acq On : 16 Mar 2011 10:49 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	TBA-d9	1.000	1.000	0.0	75	0.00
2 T	Ethanol	0.080	0.005	93.8#	5#	0.00
3 T	tert-Butanol (TBA)	1.108	0.447	59.7#	35#	0.00
4 I	Pentafluorobenzene	1.000	1.000	0.0	88	0.00
5 T	Dichlorodifluoromethane	0.916	0.948	-3.5	91	0.00
6 P	Chloromethane	0.520	0.508	2.3	99	0.00
7 C	Vinyl chloride	0.556	0.552	0.7	89	0.00
8 T	Bromomethane	0.401	0.387	3.5	81	0.00
9 T	Chloroethane	0.474	0.416	12.2	77	0.00
10 T	Trichlorofluoromethane	1.141	1.176	-3.1	89	0.00
11 T	Acetone	0.124	0.187	-50.8#	153#	0.00
12 T	Iodomethane	0.459	0.476	-3.7	78	0.00
13 C	1,1-Dichloroethene	0.586	0.528	9.9	83	0.00
14 T	Methylene chloride	0.690	0.588	14.8	80	0.00
15 T	Freon 113	0.734	0.723	1.5	86	0.00
16 T	Carbon disulfide	1.629	1.342	17.6	81	0.00
17 T	trans-1,2-Dichloroethene	0.664	0.580	12.7	81	0.00
18 T	MTBE	1.192	1.019	14.5	75	0.00
19 P	1,1-Dichloroethane	1.237	1.134	8.3	83	0.00
20 T	Vinyl acetate	0.572	0.469	18.0	69	0.00
21 T	n-Hexane	0.122	0.111	9.0	80	0.00
22 T	2-Butanone (MEK)	0.033	0.037	-12.1	106	0.00
23 T	Diisopropylether (DIPE)	2.259	1.979	12.4	77	0.00
24 T	cis-1,2-dichloroethene	0.712	0.621	12.8	79	0.00
25 T	Bromochloromethane	0.246	0.207	15.9	74	0.00
26 C	Chloroform	1.326	1.217	8.2	85	0.00
27 T	2,2-Dichloropropane	1.066	1.055	1.0	93	0.00
28 T	(ETBE) 2-Ethoxy-2-methyl pr	1.715	1.492	13.0	76	0.00
29 S	Dibromofluoromethane	0.573	0.508	11.3	77	0.00
30 T	1,2-Dichloroethane	0.829	0.772	6.9	83	0.00
31 T	1,1,1-Trichloroethane	1.160	1.135	2.2	88	0.00
32 T	(TAME) tert-Amyl methyl ethe	1.198	1.027	14.3	75	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	79	0.00
34 T	1,1-Dichloropropene	0.621	0.631	-1.6	83	0.00
35 T	Carbon tetrachloride	0.657	0.738	-12.3	90	0.00
36 T	Benzene	1.566	1.557	0.6	83	0.00
37 T	Dibromomethane	0.230	0.217	5.7	75	0.00
38 C	1,2-Dichloropropane	0.395	0.367	7.1	75	0.00
39 T	Trichloroethene	0.486	0.490	-0.8	82	0.00
40 T	Bromodichloromethane	0.614	0.618	-0.7	81	0.00
41 T	2-Chlorovinylethylether	0.129	0.111	14.0	65	0.00
42 T	cis-1,3-Dichloropropene	0.600	0.585	2.5	77	0.00
43 T	4-Methyl-2-pentanone (MIBK)	0.195	0.191	2.1	75	0.00
44 T	trans-1,3-Dichloropropene	0.494	0.492	0.4	77	0.00
45 T	1,1,2-Trichloroethane	0.262	0.247	5.7	76	0.00
46 S	Toluene-d8	1.103	1.096	0.6	78	0.00
47 C	Toluene	0.952	0.904	5.0	78	0.00

(#) = Out of Range  
 03161106.D 031411.M

Thu Mar 17 11:19:35 2011

Page 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161106.D Vial: 3  
 Acq On : 16 Mar 2011 10:49 am Operator: NL  
 Sample : 25 PPB CCV Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,3-Dichloropropane	0.489	0.452	7.6	76	0.00
50 T	2-Hexanone	0.153	0.182	-19.0	103	0.00
51 T	Dibromochloromethane	0.387	0.366	5.4	76	0.00
52 T	1,2-Dibromoethane	0.295	0.268	9.2	74	0.00
53 T	Tetrachloroethene	0.436	0.428	1.8	84	0.00
54 T	1,1,1,2-Tetrachloroethane	0.447	0.409	8.5	81	0.00
55 P	Chlorobenzene	1.148	1.090	5.1	81	0.00
56 C	Ethylbenzene	2.054	2.045	0.4	82	0.00
57 T	m,p-Xylenes	0.724	0.709	2.1	84	0.00
58 T	Styrene	1.099	1.082	1.5	81	0.00
59 T	o-Xylene	0.692	0.674	2.6	83	0.00
60 S	4-Bromofluorobenzene	0.551	0.589	-6.9	86	0.00
61 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	0.00
62 P	Bromoform	0.446	0.384	13.9	71	0.00
63 P	1,1,2,2-Tetrachloroethane	0.483	0.416	13.9	73	0.00
64 T	1,2,3-Trichloropropane	0.140	0.124	11.4	76	0.00
65 T	Isopropylbenzene	3.211	3.083	4.0	83	0.00
66 T	Bromobenzene	0.888	0.795	10.5	78	0.00
67 T	n-Propylbenzene	4.160	3.954	5.0	84	0.00
68 T	2-Chlorotoluene	2.626	2.467	6.1	84	0.00
69 T	4-Chlorotoluene	2.669	2.510	6.0	85	0.00
70 T	1,3,5-Trimethylbenzene	2.879	2.756	4.3	85	0.00
71 T	tert-Butylbenzene	2.342	2.206	5.8	83	0.00
72 T	1,2,4-Trimethylbenzene	2.886	2.804	2.8	85	0.00
73 T	sec-Butylbenzene	3.690	3.522	4.6	83	0.00
74 T	1,3-Dichlorobenzene	1.591	1.422	10.6	81	0.00
75 T	1,4-Dichlorobenzene	1.591	1.437	9.7	82	0.00
76 T	p-Isopropyltoluene	2.978	2.862	3.9	84	0.00
77 T	1,2-Dichlorobenzene	1.392	1.277	8.3	81	0.00
78 T	n-Butylbenzene	2.990	2.938	1.7	85	0.00
79 T	1,2-Dibromo-3-chloropropane	0.087	0.077	11.5	79	0.00
80 T	1,2,4-Trichlorobenzene	1.129	1.083	4.1	82	0.00
81 T	Naphthalene	1.316	1.242	5.6	76	0.00
82 T	Hexachlorobutadiene	0.596	0.601	-0.8	85	0.00
83 T	1,2,3-Trichlorobenzene	0.905	0.857	5.3	82	0.00

## 8260 Continuing Calibration (CCV) Report

**Sample Name** 25 PPB CCV  
**Data File Name** 03161106.D  
**Operator** NL  
**Date Acquired** 3/16/2011 10:49  
**Acq. Method File** 8260B

<b>Internal Standards</b>	<b>Calib.</b>		<b>Low</b>	<b>High</b>	<b>P/F</b>
	<b>Response</b>	<b>CCV Response</b>			
TBA-d9	125792	93862	46931	187724	TRUE
Pentafluorobenzene	699455	612219	306110	1224438	TRUE
1,4-Difluorobenzene	1014981	804172	402086	1608344	TRUE
Chlorobenzene-d5	936018	745719	372860	1491438	TRUE
1,4-Dichlorobenzene-d4	492554	430750	215375	861500	TRUE
<hr/>					
<b>Compound</b>	<b>%</b>		<b>Low</b>	<b>High</b>	<b>P/F</b>
	<b>Amount</b>	<b>Spiked Amount</b>			
Ethanol	16.49	250	6.60	80	140
tert-Butanol (TBA)	51.74	125	41.39	80	120
Dichlorodifluoromethane	25.89	25	103.55	60	150
Chloromethane	24.44	25	97.77	60	140
Vinyl chloride	24.82	25	99.29	80	120
Bromomethane	21.57	25	86.30	70	140
Chloroethane	21.96	25	87.86	70	130
Trichlorofluoromethane	25.77	25	103.08	70	150
Acetone	37.78	25	151.12	10	150
Iodomethane	21.89	25	87.54	70	140
1,1-Dichloroethene	22.53	25	90.10	80	120
Methylene chloride	21.29	25	85.15	70	120
Freon 113	24.64	25	98.55	60	140
Carbon disulfide	20.59	25	82.38	70	130
trans-1,2-Dichloroethene	21.86	25	87.43	80	120
MTBE	21.36	25	85.44	70	130
1,1-Dichloroethane	22.92	25	91.69	70	125
Vinyl acetate	20.47	25	81.88	40	150
n-Hexane	22.75	25	91.01	70	130
2-Butanone (MEK)	28.15	25	112.59	40	150
Diisopropylether (DIPE)	21.90	25	87.60	80	130
cis-1,2-dichloroethene	21.82	25	87.27	80	120
Bromochloromethane	21.07	25	84.29	80	120
Chloroform	22.94	25	91.77	80	120
2,2-Dichloropropane	24.75	25	99.02	80	130
(TBE) 2-Ethoxy-2-methyl propai	21.75	25	87.00	80	130
<b>Dibromofluoromethane</b>	22.15	25	88.60	80	120
1,2-Dichloroethane	23.29	25	93.14	75	130
1,1,1-Trichloroethane	24.45	25	97.81	80	120
(TAME) tert-Amyl methy ether	21.43	25	85.73	80	130
1,1-Dichloropropene	25.41	25	101.64	80	120
Carbon tetrachloride	28.06	25	112.23	80	130
Benzene	24.85	25	99.40	80	120

Dibromomethane	23.50	25	93.99	80	120	TRUE
1,2-Dichloropropane	23.23	25	92.93	80	120	TRUE
Trichloroethene	25.20	25	100.81	80	120	TRUE
Bromodichloromethane	25.17	25	100.68	80	120	TRUE
2-Chlorovinylethylether	21.54	25	86.16	70	135	TRUE
cis-1,3-Dichloropropene	24.37	25	97.49	80	120	TRUE
4-Methyl-2-pantanone (MIBK)	24.45	25	97.80	60	130	TRUE
trans-1,3-Dichloropropene	24.92	25	99.68	80	125	TRUE
1,1,2-Trichloroethane	23.60	25	94.41	80	120	TRUE
<b>Toluene-d8</b>	24.85	25	99.40	80	120	TRUE
Toluene	23.74	25	94.97	80	120	TRUE
1,3-Dichloropropane	23.14	25	92.56	80	120	TRUE
2-Hexanone	29.63	25	118.54	20	150	TRUE
Dibromochloromethane	23.64	25	94.55	80	120	TRUE
1,2-Dibromoethane	22.75	25	90.99	80	120	TRUE
Tetrachloroethene	24.51	25	98.02	70	130	TRUE
1,1,1,2-Tetrachloroethane	22.91	25	91.64	80	120	TRUE
Chlorobenzene	23.74	25	94.97	80	120	TRUE
Ethylbenzene	24.88	25	99.53	80	120	TRUE
m,p-Xylenes	24.48	25	97.91	60	140	TRUE
Styrene	24.60	25	98.41	80	120	TRUE
o-Xylene	26.46	25	105.82	80	120	TRUE
<b>4-Bromofluorobenzene</b>	26.70	25	106.81	80	120	TRUE
Bromoform	21.55	25	86.18	80	120	TRUE
1,1,2,2-Tetrachloroethane	21.53	25	86.10	80	120	TRUE
1,2,3-Trichloropropane	22.05	25	88.18	70	130	TRUE
Isopropylbenzene	24.00	25	96.01	80	130	TRUE
Bromobenzene	22.38	25	89.51	80	120	TRUE
n-Propylbenzene	23.76	25	95.04	75	130	TRUE
2-Chlorotoluene	23.49	25	93.96	80	120	TRUE
4-Chlorotoluene	23.51	25	94.04	80	120	TRUE
1,3,5-Trimethylbenzene	23.93	25	95.72	80	130	TRUE
tert-Butylbenzene	23.54	25	94.16	80	120	TRUE
1,2,4-Trimethylbenzene	24.30	25	97.19	80	120	TRUE
sec-Butylbenzene	23.86	25	95.43	80	125	TRUE
1,3-Dichlorobenzene	22.34	25	89.36	80	120	TRUE
1,4-Dichlorobenzene	22.58	25	90.31	80	120	TRUE
p-Isopropyltoluene	24.03	25	96.10	80	130	TRUE
1,2-Dichlorobenzene	22.95	25	91.79	80	120	TRUE
n-Butylbenzene	24.56	25	98.26	80	130	TRUE
1,2-Dibromo-3-chloropropane	22.10	25	88.42	50	150	TRUE
1,2,4-Trichlorobenzene	23.99	25	95.94	50	150	TRUE
Naphthalene	23.60	25	94.41	40	150	TRUE
Hexachlorobutadiene	25.22	25	100.89	40	150	TRUE
1,2,3-Trichlorobenzene	23.67	25	94.68	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161107.D Vial: 4  
 Acq On : 16 Mar 2011 11:46 am Operator: NL  
 Sample : 11C0599-BS1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:12 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.30	65	119737	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	698277	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	905675	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.94	117	850853	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	498461	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.97	113	356782	22.28	ug/L	0.00
Spiked Amount	25.000			Recovery	=	89.12%
46) Toluene-d8	13.99	98	994056	24.89	ug/L	0.00
Spiked Amount	25.000			Recovery	=	99.56%
60) 4-Bromofluorobenzene	17.62	95	508897	27.11	ug/L	0.00
Spiked Amount	25.000			Recovery	=	108.44%

## Target Compounds

				Qvalue
2) Ethanol	5.90	45	692	14.50 ug/L 99
3) tert-Butanol (TBA)	7.41	59	28280	42.94 ug/L # 83
5) Dichlorodifluoromethane	4.48	85	681715	26.65 ug/L 100
6) Chloromethane	4.78	50	357424	24.63 ug/L 99
7) Vinyl chloride	5.07	62	392903	25.32 ug/L 99
8) Bromomethane	5.67	94	303881	24.07 ug/L 91
9) Chloroethane	5.88	64	309485	23.39 ug/L 97
10) Trichlorofluoromethane	6.68	101	907533	28.49 ug/L 99
11) Acetone	6.84	43	127226	36.77 ug/L 98
12) Iodomethane	7.46	142	391235	25.46 ug/L 93
13) 1,1-Dichloroethene	7.41	96	391157	23.91 ug/L 100
14) Methylene chloride	7.60	84	429013	22.26 ug/L 99
15) Freon 113	7.67	101	480122	23.43 ug/L 99
16) Carbon disulfide	7.93	76	1074858	23.63 ug/L 99
17) trans-1,2-Dichloroethene	8.49	96	413535	22.30 ug/L 97
18) MTBE	8.62	73	820859	24.65 ug/L 99
19) 1,1-Dichloroethane	8.81	63	774050	22.40 ug/L 99
20) Vinyl acetate	8.96	43	583922	36.53 ug/L 99
21) n-Hexane	9.32	86	70665	20.72 ug/L 92
22) 2-Butanone (MEK)	9.35	72	28198	30.61 ug/L # 3
23) Diisopropylether (DIPE)	9.36	45	1441521	22.85 ug/L 98
24) cis-1,2-dichloroethene	9.55	96	419153	21.09 ug/L 97
25) Bromochloromethane	9.76	128	155808	22.67 ug/L 99
26) Chloroform	9.81	83	832937	22.49 ug/L 97
27) 2,2-Dichloropropane	9.92	77	672934	22.60 ug/L 99
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	1140422	23.81 ug/L 99
30) 1,2-Dichloroethane	10.66	62	589744	25.48 ug/L 98
31) 1,1,1-Trichloroethane	10.79	97	749841	23.14 ug/L 99
32) (TAME) tert-Amyl methy eth	11.50	73	803292	24.01 ug/L 98
34) 1,1-Dichloropropene	11.03	75	571796	25.41 ug/L 98
35) Carbon tetrachloride	11.27	117	639766	26.86 ug/L 100
36) Benzene	11.32	78	1389712	24.50 ug/L 99
37) Dibromomethane	12.05	93	231178	27.70 ug/L 99
38) 1,2-Dichloropropane	12.09	63	349889	24.48 ug/L 98
39) Trichloroethene	12.14	95	430630	24.47 ug/L 99
40) Bromodichloromethane	12.21	83	571051	25.69 ug/L 99

(#) = qualifier out of range (m) = manual integration  
 03161107.D 031411.M Thu Mar 17 11:22:07 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161107.D Vial: 4  
 Acq On : 16 Mar 2011 11:46 am Operator: NL  
 Sample : 11C0599-BS1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:12 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	123971	26.49	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	564173	25.94	ug/L	97
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	228355	32.35	ug/L	100
44) trans-1,3-Dichloropropene	13.61	75	496847	27.77	ug/L	97
45) 1,1,2-Trichloroethane	13.83	97	256295	27.03	ug/L	99
47) Toluene	14.09	92	809205	23.47	ug/L	99
49) 1,3-Dichloropropane	14.15	76	422859	25.41	ug/L	98
50) 2-Hexanone	14.33	43	172044	32.93	ug/L	98
51) Dibromochloromethane	14.52	129	351792	26.72	ug/L	100
52) 1,2-Dibromoethane	14.86	107	261120	26.02	ug/L	99
53) Tetrachloroethene	15.08	164	349282	23.53	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.89	131	354131	23.30	ug/L	97
55) Chlorobenzene	16.00	112	906163	23.19	ug/L	99
56) Ethylbenzene	16.25	91	1663099	23.79	ug/L	99
57) m,p-Xylenes	16.51	106	575838	23.38	ug/L	98
58) Styrene	16.96	104	912235	24.38	ug/L	99
59) o-Xylene	17.07	106	551782	25.42	ug/L	99
62) Bromoform	16.69	173	226355	25.46	ug/L	99
63) 1,1,2,2-Tetrachloroethane	17.05	83	256733	26.66	ug/L	98
64) 1,2,3-Trichloropropane	17.25	110	74448	26.64	ug/L	96
65) Isopropylbenzene	17.56	105	1597948	24.96	ug/L	100
66) Bromobenzene	17.92	156	401398	22.67	ug/L	98
67) n-Propylbenzene	18.17	91	1929680	23.26	ug/L	100
68) 2-Chlorotoluene	18.32	91	1159305	22.14	ug/L	98
69) 4-Chlorotoluene	18.42	91	1230076	23.12	ug/L	98
70) 1,3,5-Trimethylbenzene	18.57	105	1322235	23.03	ug/L	100
71) tert-Butylbenzene	18.96	119	1019574	21.83	ug/L	98
72) 1,2,4-Trimethylbenzene	19.11	105	1353933	23.53	ug/L	99
73) sec-Butylbenzene	19.25	105	1686510	22.92	ug/L	100
74) 1,3-Dichlorobenzene	19.35	146	696321	21.95	ug/L	98
75) 1,4-Dichlorobenzene	19.44	146	709632	22.37	ug/L	100
76) p-Isopropyltoluene	19.48	119	1350116	22.74	ug/L	99
77) 1,2-Dichlorobenzene	19.89	146	637277	22.96	ug/L	99
78) n-Butylbenzene	19.99	91	1383328	23.20	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.44	75	45150	25.89	ug/L	98
80) 1,2,4-Trichlorobenzene	22.16	180	566091	25.14	ug/L	99
81) Naphthalene	22.49	128	691537	26.36	ug/L	99
82) Hexachlorobutadiene	22.55	225	281601	23.70	ug/L	99
83) 1,2,3-Trichlorobenzene	22.76	180	455243	25.22	ug/L	99

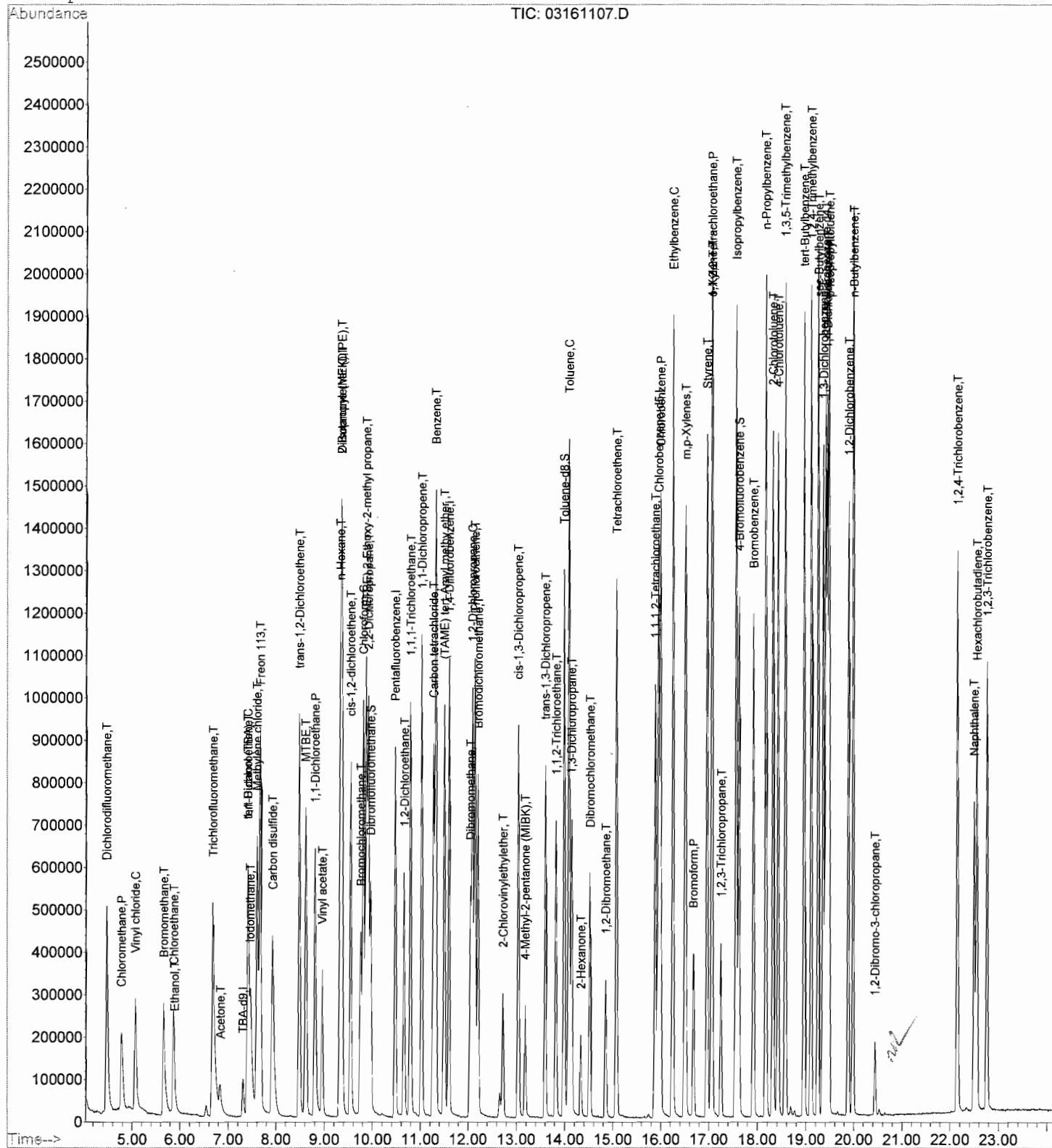
(#) = qualifier out of range (m) = manual integration

03161107.D 031411.M Thu Mar 17 11:22:07 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161107.D Vial: 4  
 Acq On : 16 Mar 2011 11:46 am Operator: NL  
 Sample : 11C0599-BS1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:12 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161108.D Vial: 5  
 Acq On : 16 Mar 2011 12:18 pm Operator: NL  
 Sample : 11C0599-BSD1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:44 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.31	65	114864	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	711831	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	904250	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	845323	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	477459	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	349276	21.40	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.60%	
46) Toluene-d8	13.99	98	979978	24.57	ug/L	0.00
Spiked Amount	25.000		Recovery	=	98.28%	
60) 4-Bromofluorobenzene	17.62	95	488750	26.21	ug/L	0.00
Spiked Amount	25.000		Recovery	=	104.84%	

## Target Compounds

				Qvalue	
2) Ethanol	5.89	45	791	17.28	ug/L # 40
3) tert-Butanol (TBA)	7.41	59	27989	44.46	ug/L # 83
5) Dichlorodifluoromethane	4.47	85	673722	25.83	ug/L 99
6) Chloromethane	4.78	50	341121	23.06	ug/L 98
7) Vinyl chloride	5.07	62	389406	24.61	ug/L 99
8) Bromomethane	5.66	94	298247	23.23	ug/L 90
9) Chloroethane	5.88	64	312410	23.16	ug/L 99
10) Trichlorofluoromethane	6.69	101	898330	27.66	ug/L 99
11) Acetone	6.84	43	89965	25.51	ug/L 97
12) Iodomethane	7.46	142	432107	27.44	ug/L 93
13) 1,1-Dichloroethene	7.41	96	378100	22.67	ug/L 97
14) Methylene chloride	7.60	84	409228	20.83	ug/L 99
15) Freon 113	7.66	101	478596	22.91	ug/L 98
16) Carbon disulfide	7.93	76	1064965	22.97	ug/L 98
17) trans-1,2-Dichloroethene	8.48	96	403067	21.32	ug/L 95
18) MTBE	8.62	73	704755	20.76	ug/L 99
19) 1,1-Dichloroethane	8.81	63	785270	22.29	ug/L 100
20) Vinyl acetate	8.96	43	497079	30.51	ug/L 100
21) n-Hexane	9.33	86	73654	21.18	ug/L 96
22) 2-Butanone (MEK)	9.36	72	22775	24.25	ug/L # 50
23) Diisopropylether (DIPE)	9.36	45	1368706	21.28	ug/L 97
24) cis-1,2-dichloroethene	9.55	96	412799	20.37	ug/L 98
25) Bromochloromethane	9.76	128	143959	20.55	ug/L 99
26) Chloroform	9.82	83	818863	21.69	ug/L 96
27) 2,2-Dichloropropane	9.93	77	662614	21.83	ug/L 98
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	1029751	21.09	ug/L 98
30) 1,2-Dichloroethane	10.66	62	516125	21.87	ug/L 99
31) 1,1,1-Trichloroethane	10.79	97	750898	22.73	ug/L 99
32) (TAME) tert-Amyl methyl eth	11.50	73	714033	20.94	ug/L 98
34) 1,1-Dichloropropene	11.03	75	578852	25.76	ug/L 98
35) Carbon tetrachloride	11.28	117	638839	26.86	ug/L 99
36) Benzene	11.32	78	1391243	24.56	ug/L 99
37) Dibromomethane	12.05	93	204823	24.58	ug/L 98
38) 1,2-Dichloropropane	12.09	63	348222	24.40	ug/L 99
39) Trichloroethene	12.14	95	432314	24.61	ug/L 99
40) Bromodichloromethane	12.20	83	548597	24.72	ug/L 99

(#) = qualifier out of range (m) = manual integration

03161108.D 031411.M Thu Mar 17 11:22:13 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161108.D Vial: 5  
 Acq On : 16 Mar 2011 12:18 pm Operator: NL  
 Sample : 11C0599-BSD1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:44 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

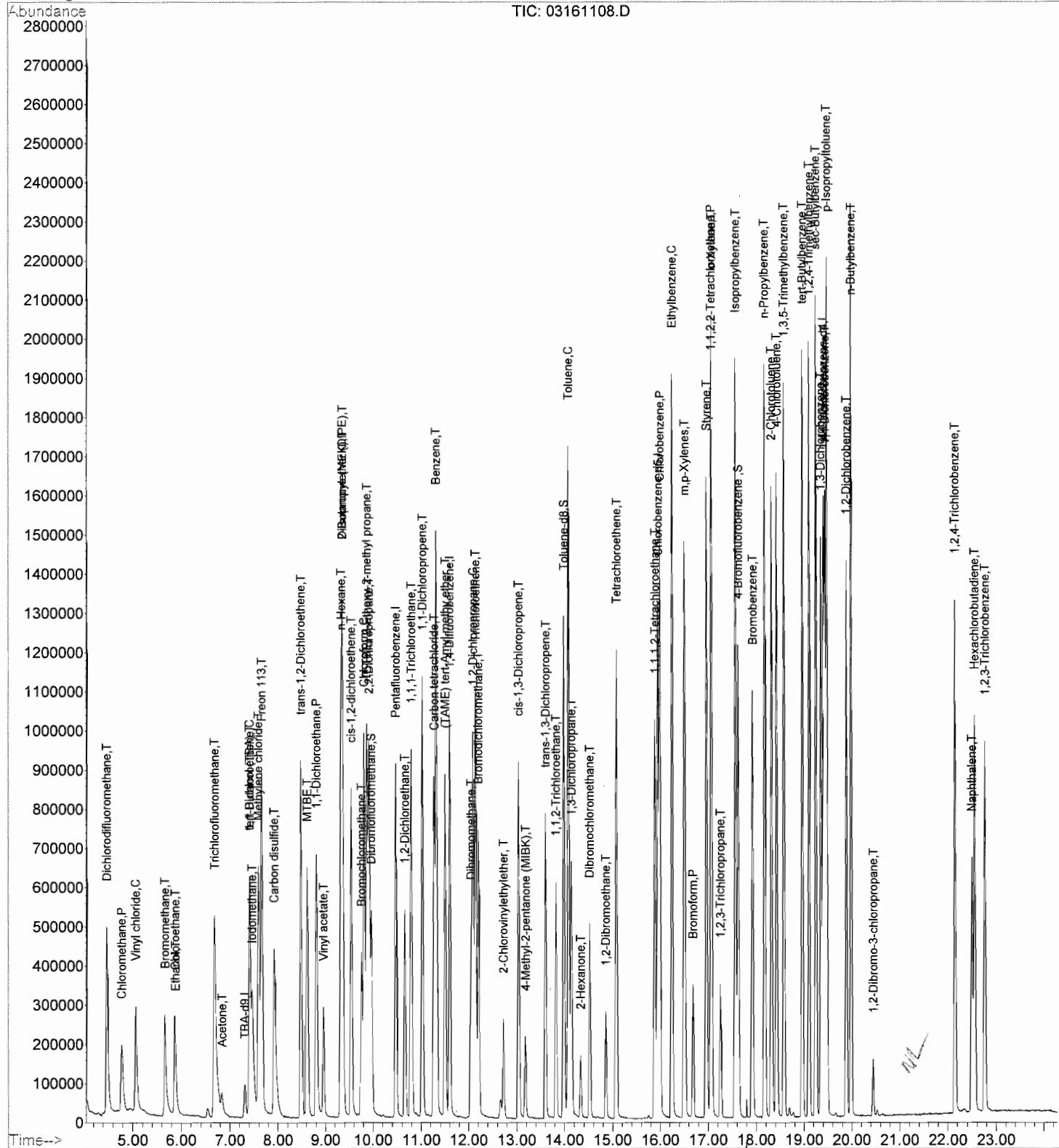
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	108205	23.16	ug/L	98
42) cis-1,3-Dichloropropene	13.04	75	532482	24.52	ug/L	97
43) 4-Methyl-2-pentanone (MIBK)	13.17	43	184981	26.24	ug/L	99
44) trans-1,3-Dichloropropene	13.60	75	455833	25.52	ug/L	97
45) 1,1,2-Trichloroethane	13.82	97	222081	23.46	ug/L	99
47) Toluene	14.09	92	836692	24.31	ug/L	99
49) 1,3-Dichloropropane	14.14	76	380700	23.03	ug/L	98
50) 2-Hexanone	14.33	43	136355	26.27	ug/L	99
51) Dibromochloromethane	14.52	129	310781	23.76	ug/L	99
52) 1,2-Dibromoethane	14.85	107	222558	22.32	ug/L	99
53) Tetrachloroethene	15.08	164	358272	24.29	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.88	131	343498	22.75	ug/L	98
55) Chlorobenzene	15.99	112	899274	23.16	ug/L	99
56) Ethylbenzene	16.25	91	1707247	24.58	ug/L	100
57) m,p-Xylenes	16.51	106	573929	23.45	ug/L	98
58) Styrene	16.96	104	890993	23.97	ug/L	99
59) o-Xylene	17.06	106	546977	25.36	ug/L	100
62) Bromoform	16.68	173	193000	22.67	ug/L	98
63) 1,1,2,2-Tetrachloroethane	17.05	83	213330	23.13	ug/L	99
64) 1,2,3-Trichloropropane	17.25	110	60089	22.45	ug/L	99
65) Isopropylbenzene	17.56	105	1608852	26.23	ug/L	98
66) Bromobenzene	17.92	156	384406	22.67	ug/L	99
67) n-Propylbenzene	18.18	91	1944169	24.47	ug/L	100
68) 2-Chlorotoluene	18.31	91	1164060	23.21	ug/L	98
69) 4-Chlorotoluene	18.42	91	1226615	24.07	ug/L	98
70) 1,3,5-Trimethylbenzene	18.57	105	1324668	24.09	ug/L	100
71) tert-Butylbenzene	18.96	119	1051556	23.51	ug/L	99
72) 1,2,4-Trimethylbenzene	19.11	105	1298672	23.57	ug/L	99
73) sec-Butylbenzene	19.25	105	1676376	23.79	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	688352	22.65	ug/L	100
75) 1,4-Dichlorobenzene	19.44	146	685300	22.55	ug/L	99
76) p-Isopropyltoluene	19.48	119	1341954	23.60	ug/L	99
77) 1,2-Dichlorobenzene	19.88	146	608429	22.89	ug/L	99
78) n-Butylbenzene	19.98	91	1419039	24.85	ug/L	100
79) 1,2-Dibromo-3-chloropropan	20.45	75	37699	22.56	ug/L	96
80) 1,2,4-Trichlorobenzene	22.15	180	536158	24.86	ug/L	100
81) Naphthalene	22.50	128	619845	24.66	ug/L	99
82) Hexachlorobutadiene	22.55	225	287169	25.23	ug/L	99
83) 1,2,3-Trichlorobenzene	22.77	180	420305	24.31	ug/L	100

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161108.D Vial: 5  
 Acq On : 16 Mar 2011 12:18 pm Operator: NL  
 Sample : 11C0599-BSD1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 16 12:44 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161109.D Vial: 6  
 Acq On : 16 Mar 2011 12:50 pm Operator: NL  
 Sample : 11C0599-MS1 Inst : GCMS13  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:13 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	106436	200.00	ug/L	0.00
4) Pentafluorobenzene	10.47	168	705314	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.60	114	902088	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	845312	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	466090	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	333350	20.61	ug/L	0.00
Spiked Amount	25.000			Recovery	=	82.44%
46) Toluene-d8	13.99	98	1000123	25.14	ug/L	0.00
Spiked Amount	25.000			Recovery	=	100.56%
60) 4-Bromofluorobenzene	17.62	95	482493	25.88	ug/L	0.00
Spiked Amount	25.000			Recovery	=	103.52%

## Target Compounds

					Qvalue
2) Ethanol	5.91	45	1492	35.17	ug/L # 37
3) tert-Butanol (TBA)	7.42	59	31505	55.08	ug/L # 85
5) Dichlorodifluoromethane	4.48	85	710839	27.51	ug/L 99
6) Chloromethane	4.79	50	361733	24.68	ug/L 100
7) Vinyl chloride	5.08	62	518390	33.07	ug/L 99
8) Bromomethane	5.67	94	265617	21.04	ug/L 97
9) Chloroethane	5.88	64	297050	22.23	ug/L 99
10) Trichlorofluoromethane	6.69	101	916486	28.48	ug/L 100
11) Acetone	6.87	43	118334	33.86	ug/L # 82
12) Iodomethane	7.48	142	316662	20.76	ug/L 92
13) 1,1-Dichloroethene	7.42	96	401523	24.30	ug/L 100
14) Methylene chloride	7.60	84	386409	19.85	ug/L 97
15) Freon 113	7.67	101	504483	24.37	ug/L 99
16) Carbon disulfide	7.93	76	1101977	23.98	ug/L 98
17) trans-1,2-Dichloroethene	8.49	96	422054	22.54	ug/L 96
18) MTBE	8.62	73	755514	22.46	ug/L 99
19) 1,1-Dichloroethane	8.82	63	780592	22.37	ug/L 99
20) Vinyl acetate	8.96	43	516441	31.99	ug/L 100
21) n-Hexane	9.33	86	80908	23.48	ug/L 94
22) 2-Butanone (MEK)	9.35	72	20483	22.01	ug/L # 86
23) Diisopropylether (DIPE)	9.37	45	1363120	21.39	ug/L 96
24) cis-1,2-dichloroethene	9.55	96	418257	20.83	ug/L 99
25) Bromochloromethane	9.76	128	130052	18.74	ug/L 96
26) Chloroform	9.82	83	818910	21.89	ug/L 97
27) 2,2-Dichloropropane	9.92	77	651473	21.66	ug/L 97
28) (ETBE) 2-Ethoxy-2-methyl p	9.87	59	1029885	21.28	ug/L 98
30) 1,2-Dichloroethane	10.66	62	510519	21.83	ug/L 99
31) 1,1,1-Trichloroethane	10.79	97	761510	23.26	ug/L 100
32) (TAME) tert-Amyl methyl eth	11.50	73	699646	20.71	ug/L 98
34) 1,1-Dichloropropene	11.03	75	599566	26.75	ug/L 99
35) Carbon tetrachloride	11.27	117	650145	27.40	ug/L 100
36) Benzene	11.33	78	13388166	236.94	ug/L 94
37) Dibromomethane	12.05	93	199622	24.01	ug/L 100
38) 1,2-Dichloropropane	12.09	63	337032	23.67	ug/L 98
39) Trichloroethene	12.15	95	445564	25.42	ug/L 99
40) Bromodichloromethane	12.21	83	526681	23.79	ug/L 100

(#) = qualifier out of range (m) = manual integration

03161109.D 031411.M Thu Mar 17 11:22:20 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161109.D Vial: 6  
 Acq On : 16 Mar 2011 12:50 pm Operator: NL  
 Sample : 11C0599-MS1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:13 2011 Quant Results File: 031411.RES

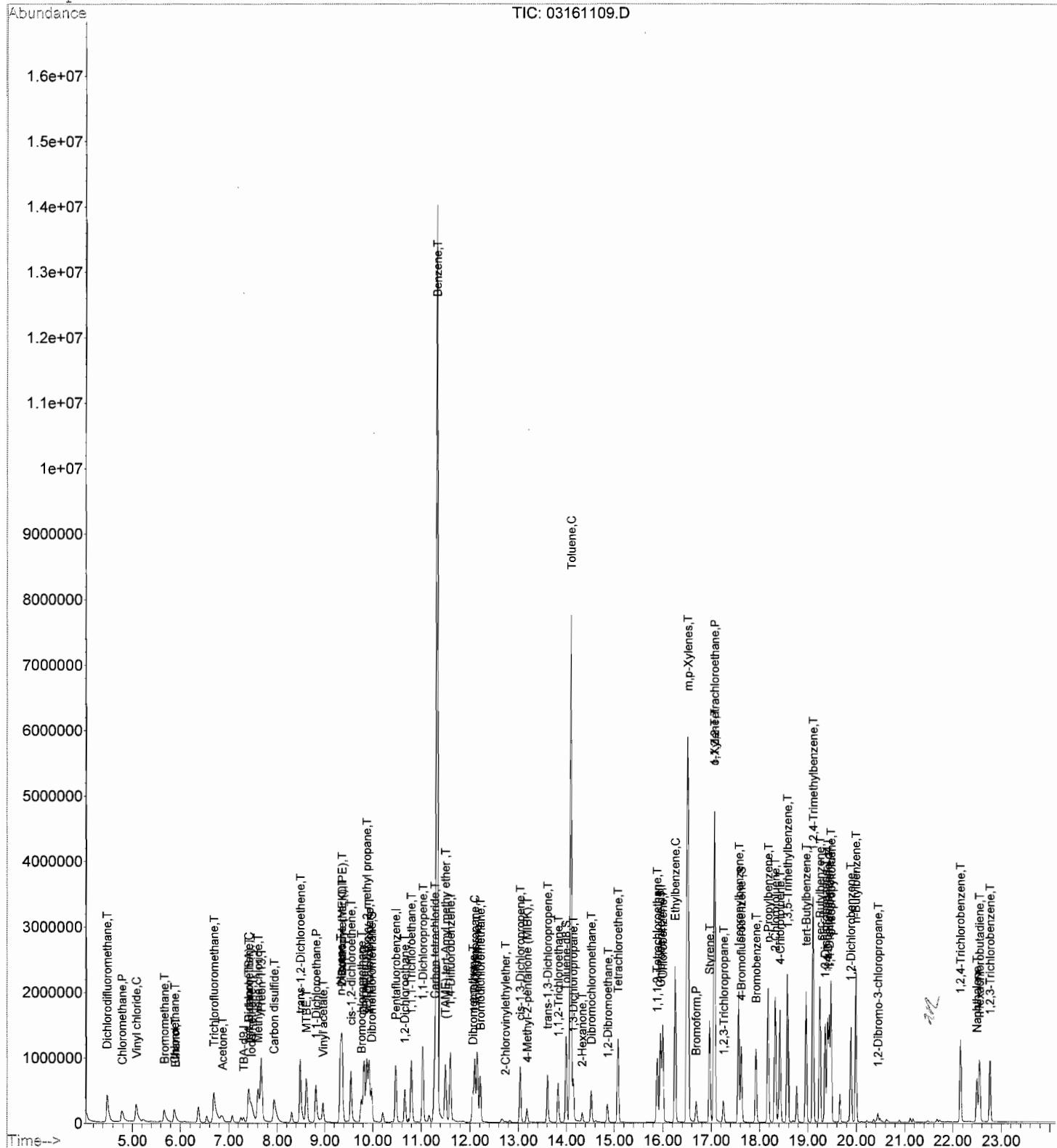
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.73	63	3245	0.70	ug/L	# 77
42) cis-1,3-Dichloropropene	13.04	75	512535	23.66	ug/L	97
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	184691	26.27	ug/L	100
44) trans-1,3-Dichloropropene	13.60	75	442324	24.82	ug/L	99
45) 1,1,2-Trichloroethane	13.83	97	220759	23.38	ug/L	99
47) Toluene	14.09	92	4041767	117.70	ug/L	98
49) 1,3-Dichloropropane	14.14	76	360181	21.79	ug/L	99
50) 2-Hexanone	14.33	43	120968	23.31	ug/L	98
51) Dibromochloromethane	14.52	129	307863	23.53	ug/L	98
52) 1,2-Dibromoethane	14.86	107	226051	22.67	ug/L	100
53) Tetrachloroethene	15.08	164	368974	25.02	ug/L	100
54) 1,1,1,2-Tetrachloroethane	15.88	131	339555	22.49	ug/L	98
55) Chlorobenzene	16.00	112	915657	23.59	ug/L	99
56) Ethylbenzene	16.25	91	2110706	30.39	ug/L	99
57) m,p-Xylenes	16.51	106	2398179	98.00	ug/L	99
58) Styrene	16.96	104	870818	23.43	ug/L	99
59) o-Xylene	17.07	106	1390151	66.24	ug/L	98
62) Bromoform	16.68	173	181137	21.79	ug/L	100
63) 1,1,2,2-Tetrachloroethane	17.05	83	196550	21.83	ug/L	95
64) 1,2,3-Trichloropropene	17.26	110	61272	23.45	ug/L	96
65) Isopropylbenzene	17.57	105	1680973	28.08	ug/L	100
66) Bromobenzene	17.92	156	387060	23.38	ug/L	100
67) n-Propylbenzene	18.18	91	2026359	26.13	ug/L	100
68) 2-Chlorotoluene	18.32	91	1198311	24.48	ug/L	96
69) 4-Chlorotoluene	18.42	91	1235848	24.84	ug/L	98
70) 1,3,5-Trimethylbenzene	18.57	105	1561306	29.08	ug/L	100
71) tert-Butylbenzene	18.96	119	1057680	24.22	ug/L	98
72) 1,2,4-Trimethylbenzene	19.11	105	2286793	42.51	ug/L	99
73) sec-Butylbenzene	19.25	105	1687007	24.52	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	671753	22.65	ug/L	99
75) 1,4-Dichlorobenzene	19.44	146	685464	23.11	ug/L	100
76) p-Isopropyltoluene	19.48	119	1363978	24.57	ug/L	100
77) 1,2-Dichlorobenzene	19.89	146	591720	22.80	ug/L	100
78) n-Butylbenzene	19.98	91	1426772	25.59	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.45	75	37410	22.94	ug/L	90
80) 1,2,4-Trichlorobenzene	22.16	180	530295	25.19	ug/L	100
81) Naphthalene	22.50	128	633406	25.82	ug/L	99
82) Hexachlorobutadiene	22.56	225	277804	25.01	ug/L	99
83) 1,2,3-Trichlorobenzene	22.77	180	404953	23.99	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161109.D Vial: 6  
Acq On : 16 Mar 2011 12:50 pm Operator: NL  
Sample : 11C0599-MS1 Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 17 11:13 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161110.D Vial: 7  
 Acq On : 16 Mar 2011 1:23 pm Operator: NL  
 Sample : 11C0599-MSD1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:11 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) TBA-d9	7.31	65	115594	200.00	ug/L	0.00
4) Pentafluorobenzene	10.48	168	718448	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	935427	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	869651	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.40	152	464209	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	342057	20.76	ug/L	0.01
Spiked Amount	25.000		Recovery	=	83.04%	
46) Toluene-d8	14.00	98	998168	24.19	ug/L	0.00
Spiked Amount	25.000		Recovery	=	96.76%	
60) 4-Bromofluorobenzene	17.62	95	482021	25.13	ug/L	0.00
Spiked Amount	25.000		Recovery	=	100.52%	

## Target Compounds

					Qvalue
2) Ethanol	5.93	45	1171	25.42	ug/L
3) tert-Butanol (TBA)	7.41	59	32937	52.84	ug/L #
5) Dichlorodifluoromethane	4.48	85	686210	26.07	ug/L 100
6) Chloromethane	4.78	50	381884	25.57	ug/L 99
7) Vinyl chloride	5.07	62	407123	25.50	ug/L 98
8) Bromomethane	5.67	94	326818	25.08	ug/L 94
9) Chloroethane	5.88	64	307136	22.56	ug/L 98
10) Trichlorofluoromethane	6.69	101	903112	27.55	ug/L 98
11) Acetone	6.86	43	116906	32.84	ug/L # 83
12) Iodomethane	7.47	142	435375	27.40	ug/L 96
13) 1,1-Dichloroethene	7.41	96	386887	22.98	ug/L 98
14) Methylene chloride	7.60	84	398556	20.10	ug/L 98
15) Freon 113	7.67	101	485250	23.01	ug/L 99
16) Carbon disulfide	7.93	76	1110689	23.73	ug/L 100
17) trans-1,2-Dichloroethene	8.49	96	419031	21.97	ug/L 97
18) MTBE	8.62	73	727639	21.24	ug/L 99
19) 1,1-Dichloroethane	8.81	63	760175	21.38	ug/L 99
20) Vinyl acetate	8.96	43	555923	33.81	ug/L 99
21) n-Hexane	9.33	86	77550	22.10	ug/L 98
22) 2-Butanone (MEK)	9.35	72	20487	21.61	ug/L # 75
23) Diisopropylether (DIPE)	9.36	45	1324305	20.40	ug/L 97
24) cis-1,2-dichloroethene	9.55	96	423620	20.71	ug/L 99
25) Bromochloromethane	9.77	128	136956	19.37	ug/L 97
26) Chloroform	9.82	83	793760	20.83	ug/L 98
27) 2,2-Dichloropropane	9.93	77	691026	22.56	ug/L 95
28) (ETBE) 2-Ethoxy-2-methyl p	9.88	59	1013197	20.56	ug/L 97
30) 1,2-Dichloroethane	10.66	62	493526	20.72	ug/L 100
31) 1,1,1-Trichloroethane	10.80	97	747869	22.43	ug/L 99
32) (TAME) tert-Amyl methyl eth	11.51	73	677451	19.68	ug/L 99
34) 1,1-Dichloropropene	11.03	75	585232	25.18	ug/L 99
35) Carbon tetrachloride	11.28	117	635248	25.82	ug/L 99
36) Benzene	11.32	78	13792652	235.40	ug/L 95
37) Dibromomethane	12.06	93	193125	22.40	ug/L 99
38) 1,2-Dichloropropane	12.10	63	337128	22.83	ug/L 99
39) Trichloroethene	12.15	95	432601	23.80	ug/L 99
40) Bromodichloromethane	12.21	83	520068	22.65	ug/L 99

(#) = qualifier out of range (m) = manual integration  
 03161110.D 031411.M Thu Mar 17 11:22:26 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161110.D Vial: 7  
 Acq On : 16 Mar 2011 1:23 pm Operator: NL  
 Sample : 11C0599-MSD1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:11 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

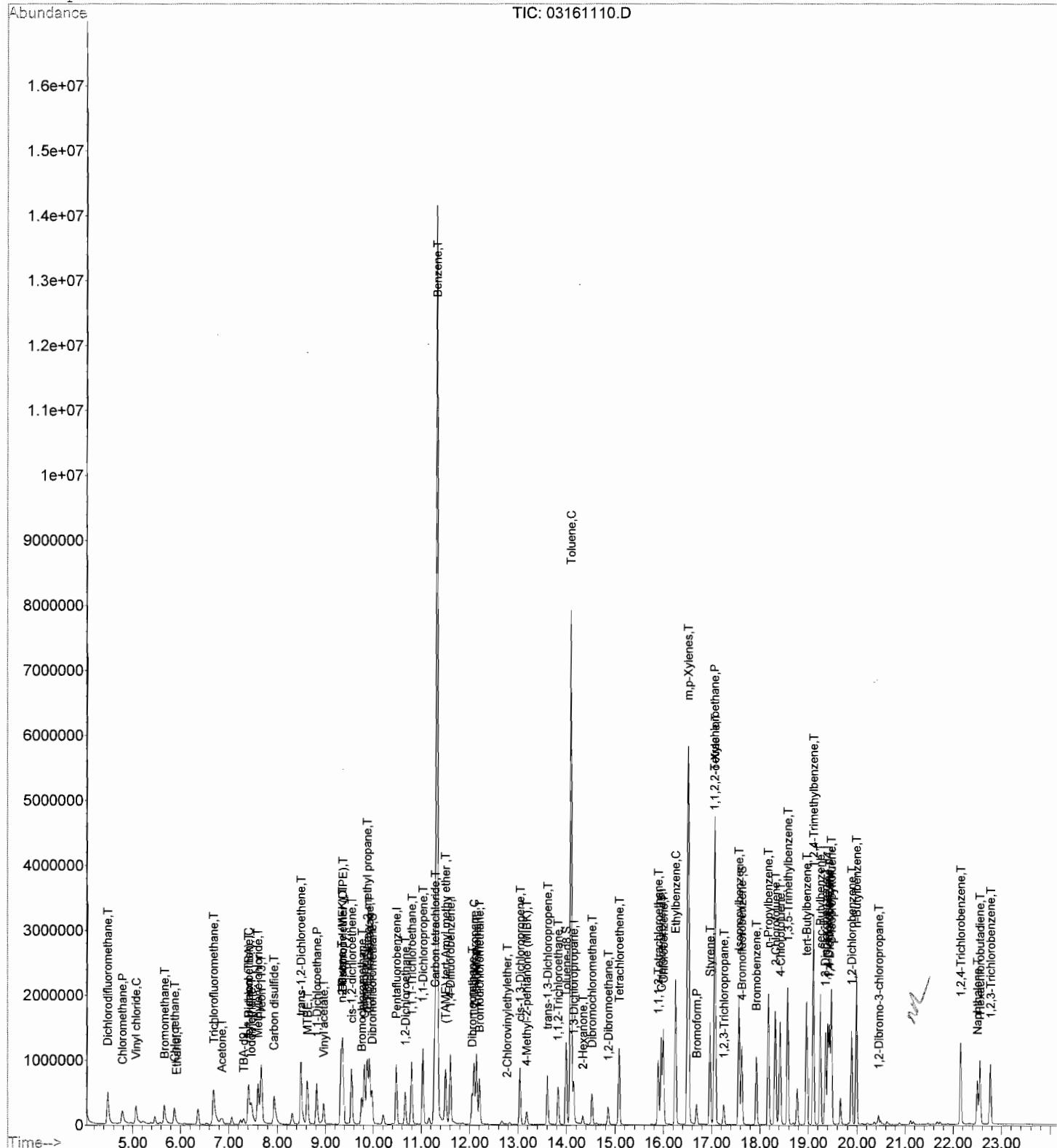
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 2-Chlorovinylethylether	12.78	63	883	0.18	ug/L #	29
42) cis-1,3-Dichloropropene	13.04	75	513987	22.88	ug/L	97
43) 4-Methyl-2-pentanone (MIBK)	13.18	43	174564	23.94	ug/L	98
44) trans-1,3-Dichloropropene	13.61	75	442718	23.96	ug/L	99
45) 1,1,2-Trichloroethane	13.83	97	210953	21.54	ug/L	98
47) Toluene	14.09	92	4038495	113.41	ug/L	98
49) 1,3-Dichloropropane	14.15	76	354473	20.84	ug/L	97
50) 2-Hexanone	14.33	43	108188	20.26	ug/L	98
51) Dibromochloromethane	14.53	129	293399	21.80	ug/L	99
52) 1,2-Dibromoethane	14.86	107	216554	21.11	ug/L	100
53) Tetrachloroethene	15.08	164	349572	23.04	ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.89	131	330196	21.25	ug/L	99
55) Chlorobenzene	16.00	112	885479	22.17	ug/L	99
56) Ethylbenzene	16.25	91	2023293	28.31	ug/L	100
57) m,p-Xylenes	16.51	106	2314877	91.95	ug/L	99
58) Styrene	16.97	104	862904	22.56	ug/L	100
59) o-Xylene	17.07	106	1387563	64.19	ug/L	99
62) Bromoform	16.69	173	176642	21.34	ug/L	100
63) 1,1,2,2-Tetrachloroethane	17.05	83	190455	21.24	ug/L	97
64) 1,2,3-Trichloropropene	17.25	110	57907	22.25	ug/L	95
65) Isopropylbenzene	17.57	105	1612958	27.05	ug/L	100
66) Bromobenzene	17.93	156	369220	22.39	ug/L	99
67) n-Propylbenzene	18.17	91	1973462	25.55	ug/L	100
68) 2-Chlorotoluene	18.32	91	1139974	23.38	ug/L	96
69) 4-Chlorotoluene	18.43	91	1159298	23.39	ug/L	99
70) 1,3,5-Trimethylbenzene	18.58	105	1512731	28.29	ug/L	99
71) tert-Butylbenzene	18.97	119	1011702	23.26	ug/L	98
72) 1,2,4-Trimethylbenzene	19.11	105	2164264	40.39	ug/L	99
73) sec-Butylbenzene	19.25	105	1595388	23.28	ug/L	100
74) 1,3-Dichlorobenzene	19.36	146	644663	21.82	ug/L	99
75) 1,4-Dichlorobenzene	19.45	146	645000	21.83	ug/L	100
76) p-Isopropyltoluene	19.48	119	1282442	23.19	ug/L	98
77) 1,2-Dichlorobenzene	19.89	146	571417	22.11	ug/L	100
78) n-Butylbenzene	19.99	91	1380353	24.86	ug/L	99
79) 1,2-Dibromo-3-chloropropan	20.45	75	35656	21.95	ug/L	96
80) 1,2,4-Trichlorobenzene	22.16	180	518173	24.71	ug/L	99
81) Naphthalene	22.50	128	664048	27.18	ug/L	100
82) Hexachlorobutadiene	22.55	225	276257	24.97	ug/L	100
83) 1,2,3-Trichlorobenzene	22.77	180	411341	24.47	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161110.D Vial: 7  
Acq On : 16 Mar 2011 1:23 pm Operator: NL  
Sample : 11C0599-MSD1 Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 17 11:11 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161111.D Vial: 8  
 Acq On : 16 Mar 2011 1:55 pm Operator: NL  
 Sample : BLK Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:14 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

*Clean air*

Internal Standards	R.T.	QIon	Response	Conc Units	Dev (Min)
1) TBA-d9	7.31	65	94570	200.00 ug/L	0.00
4) Pentafluorobenzene	10.48	168	707358	25.00 ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	903320	25.00 ug/L	0.00
48) Chlorobenzene-d5	15.95	117	817033	25.00 ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	479221	25.00 ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	330379	20.37 ug/L	0.01
Spiked Amount	25.000		Recovery	= 81.48%	
46) Toluene-d8	14.00	98	982784	24.67 ug/L	0.00
Spiked Amount	25.000		Recovery	= 98.68%	
60) 4-Bromofluorobenzene	17.62	95	486618	27.00 ug/L	0.00
Spiked Amount	25.000		Recovery	= 108.00%	

## Target Compounds

				Qvalue	
2) Ethanol	5.91	45	757	20.08 ug/L	69
3) tert-Butanol (TBA)	7.44	59	213	Below Cal #	81
6) Chloromethane	4.78	50	1736	0.12 ug/L #	1
8) Bromomethane	5.68	94	1288	0.93 ug/L #	65
11) Acetone	6.87	43	5135	1.47 ug/L #	71
12) Iodomethane	7.47	142	1134	1.86 ug/L #	86
14) Methylene chloride	7.60	84	2412	0.12 ug/L	85
16) Carbon disulfide	7.95	76	14060	0.31 ug/L #	97
17) trans-1,2-Dichloroethene	8.49	96	1762	0.09 ug/L #	79
24) cis-1,2-dichloroethene	9.56	96	1886	0.09 ug/L #	80
25) Bromochloromethane	9.77	128	716	0.10 ug/L	96
26) Chloroform	9.82	83	4418	0.12 ug/L #	95
36) Benzene	11.33	78	13559	0.24 ug/L	97
37) Dibromomethane	12.05	93	1551	0.19 ug/L #	82
42) cis-1,3-Dichloropropene	13.05	75	1974	0.09 ug/L #	48
43) 4-Methyl-2-pentanone (MIBK)	13.19	43	3906	0.55 ug/L	97
44) trans-1,3-Dichloropropene	13.62	75	2298	0.13 ug/L #	28
47) Toluene	14.10	92	8218	0.24 ug/L	98
50) 2-Hexanone	14.34	43	4170	0.83 ug/L #	78
54) 1,1,1,2-Tetrachloroethane	15.89	131	1333	0.09 ug/L #	25
55) Chlorobenzene	16.00	112	4472	0.12 ug/L #	38
56) Ethylbenzene	16.26	91	8392	0.13 ug/L #	76
57) m,p-Xylenes	16.51	106	9013	0.38 ug/L	96
58) Styrene	16.97	104	5710	0.16 ug/L #	89
63) 1,1,2,2-Tetrachloroethane	17.06	83	2060	0.22 ug/L #	84
64) 1,2,3-Trichloropropane	17.25	110	630	0.23 ug/L #	81
65) Isopropylbenzene	17.56	105	7917	0.13 ug/L	98
66) Bromobenzene	17.93	156	3472	0.20 ug/L	92
67) n-Propylbenzene	18.18	91	12651	0.16 ug/L	95
68) 2-Chlorotoluene	18.32	91	8911	0.18 ug/L #	89
69) 4-Chlorotoluene	18.43	91	9119	0.18 ug/L	97
70) 1,3,5-Trimethylbenzene	18.58	105	8319	0.15 ug/L	99
71) tert-Butylbenzene	18.97	119	8270	0.18 ug/L #	79
72) 1,2,4-Trimethylbenzene	19.11	105	15153	0.27 ug/L	100
73) sec-Butylbenzene	19.25	105	13766	0.19 ug/L	94
74) 1,3-Dichlorobenzene	19.36	146	10007	0.33 ug/L	94

(#) = qualifier out of range (m) = manual integration

03161111.D 031411.M Thu Mar 17 11:22:33 2011

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161111.D Vial: 8  
Acq On : 16 Mar 2011 1:55 pm Operator: NL  
Sample : BLK Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 17 11:14 2011 Quant Results File: 031411.RES

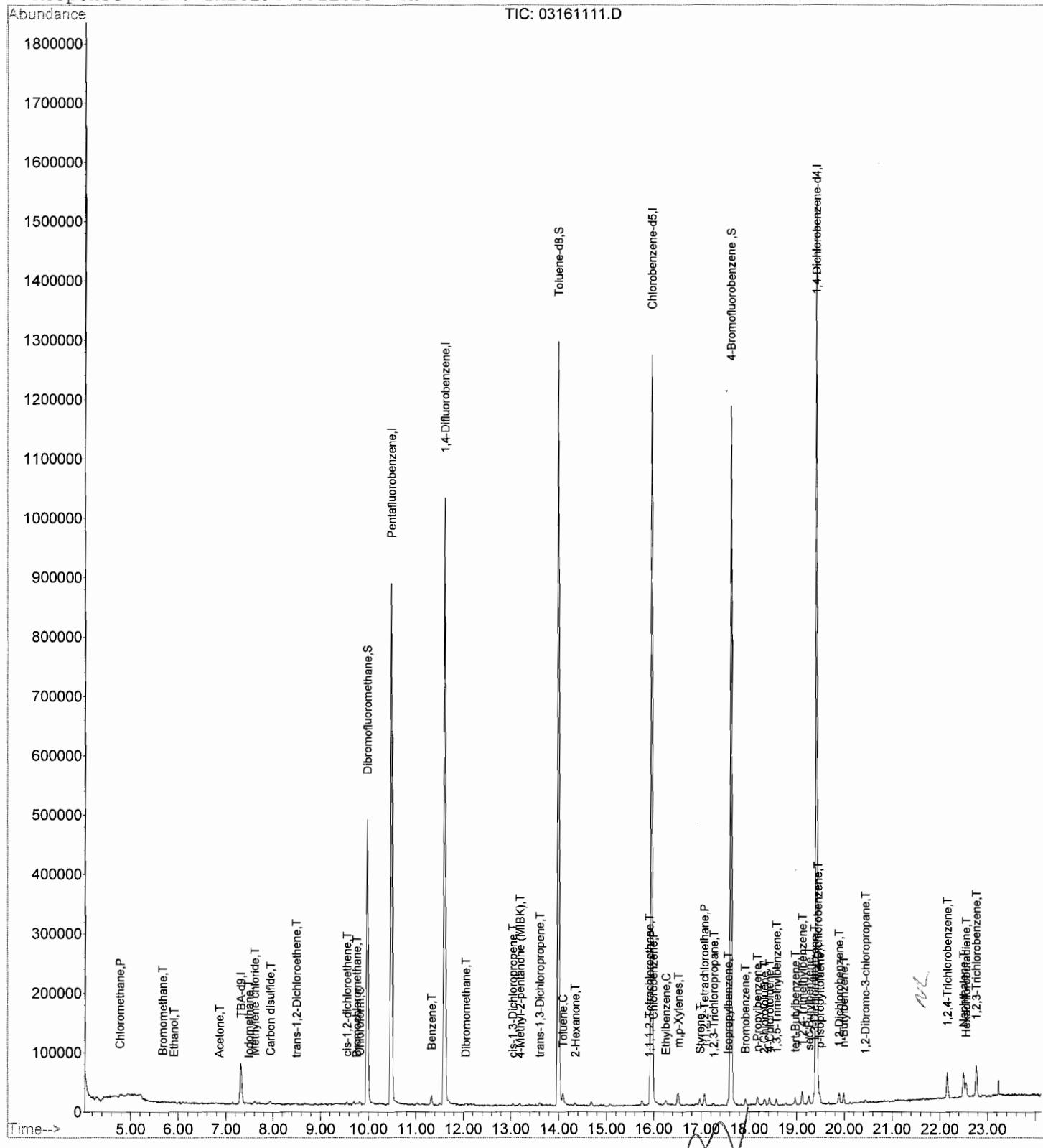
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration  
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75) 1,4-Dichlorobenzene	19.45	146	9627	0.32	ug/L	# 62
76) p-Isopropyltoluene	19.48	119	11808	0.21	ug/L	# 87
77) 1,2-Dichlorobenzene	19.89	146	8935	0.33	ug/L	96
78) n-Butylbenzene	19.99	91	13989	0.24	ug/L	98
79) 1,2-Dibromo-3-chloropropan	20.45	75	1692	1.01	ug/L	# 59
80) 1,2,4-Trichlorobenzene	22.16	180	17648	0.82	ug/L	98
81) Naphthalene	22.50	128	41796	1.66	ug/L	100
82) Hexachlorobutadiene	22.55	225	6839	0.60	ug/L	98
83) 1,2,3-Trichlorobenzene	22.77	180	23519	1.36	ug/L	99

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161111.D Vial: 8  
Acq On : 16 Mar 2011 1:55 pm Operator: NL  
Sample : BLK Inst : GCMS13  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Mar 17 11:14 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260  
Last Update : Mon Mar 14 16:22:34 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161112.D Vial: 9  
 Acq On : 16 Mar 2011 2:27 pm Operator: NL  
 Sample : 11C0599-BLK1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:11 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.32	65	106980	200.00	ug/L	0.00
4) Pentafluorobenzene	10.48	168	668095	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	860596	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.96	117	798925	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	472150	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	323707	21.13	ug/L	0.02
Spiked Amount	25.000			Recovery	=	84.52%
46) Toluene-d8	14.00	98	928756	24.47	ug/L	0.00
Spiked Amount	25.000			Recovery	=	97.88%
60) 4-Bromofluorobenzene	17.63	95	467212	26.51	ug/L	0.00
Spiked Amount	25.000			Recovery	=	106.04%

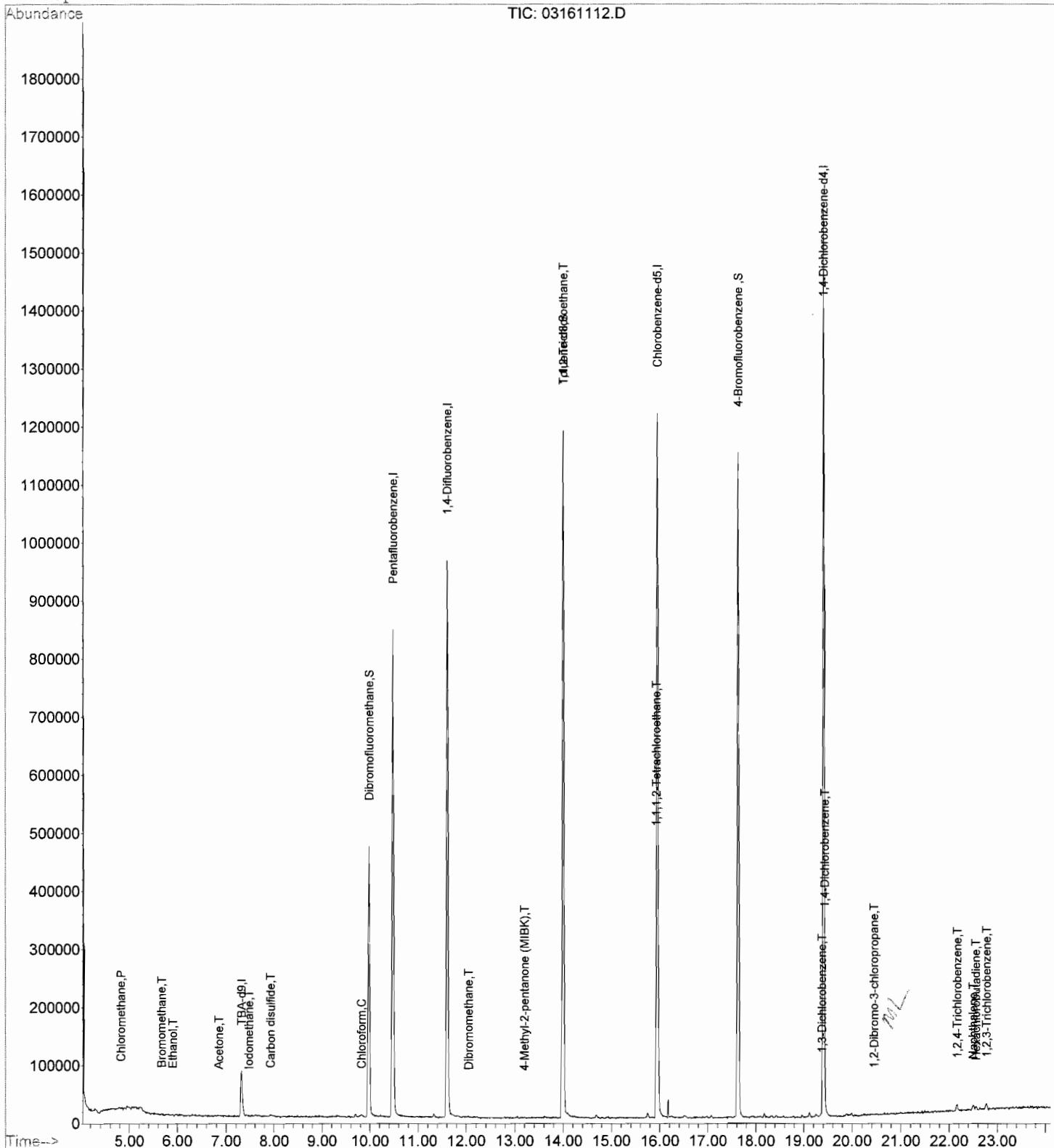
## Target Compounds

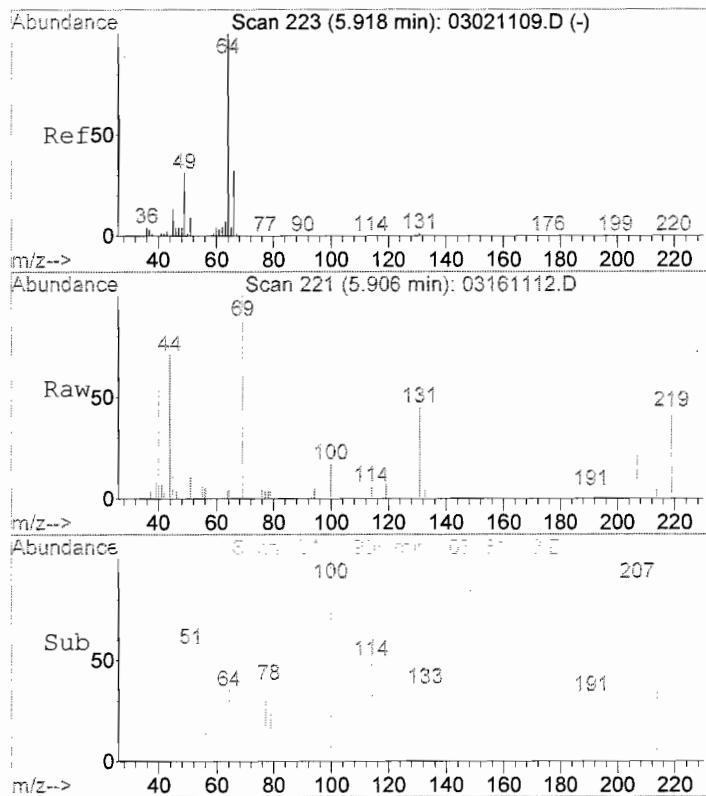
					Qvalue
2) Ethanol	5.91	45	810	19.00	ug/L
3) tert-Butanol (TBA)	7.42	59	110	Below Cal	#
6) Chloromethane	4.82	50	3056	0.22	ug/L
8) Bromomethane	5.68	94	679	0.88	ug/L
11) Acetone	6.86	43	3649	1.10	ug/L
12) Iodomethane	7.48	142	450	1.82	ug/L
16) Carbon disulfide	7.93	76	8952	0.21	ug/L
26) Chloroform	9.83	83	3432	0.10	ug/L
37) Dibromomethane	12.06	93	718	0.09	ug/L
43) 4-Methyl-2-pentanone (MIBK)	13.19	43	857	0.13	ug/L
45) 1,1,2-Trichloroethane	14.01	97	13864	1.54	ug/L
54) 1,1,1,2-Tetrachloroethane	15.92	131	1330	0.09	ug/L
59) o-Xylene	17.07	106	889	Below Cal	#
74) 1,3-Dichlorobenzene	19.37	146	3079	0.10	ug/L
75) 1,4-Dichlorobenzene	19.44	146	3457	0.12	ug/L
79) 1,2-Dibromo-3-chloropropan	20.45	75	464	0.28	ug/L
80) 1,2,4-Trichlorobenzene	22.16	180	4882	0.23	ug/L
81) Naphthalene	22.50	128	7680	0.31	ug/L
82) Hexachlorobutadiene	22.55	225	1280	0.11	ug/L
83) 1,2,3-Trichlorobenzene	22.77	180	5027	0.29	ug/L

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161112.D Vial: 9  
 Acq On : 16 Mar 2011 2:27 pm Operator: NL  
 Sample : 11C0599-BLK1 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 11:11 2011 Quant Results File: 031411.RES

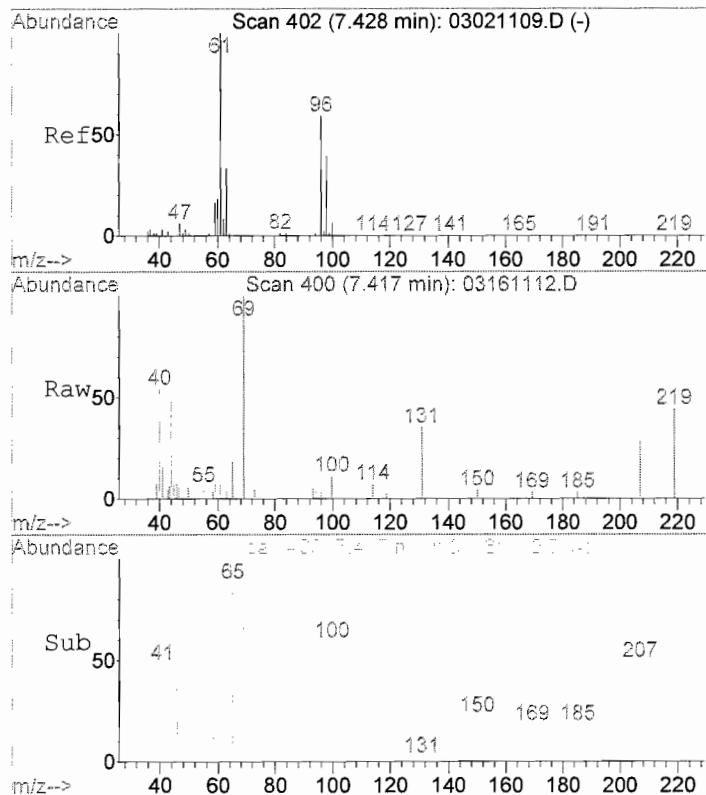
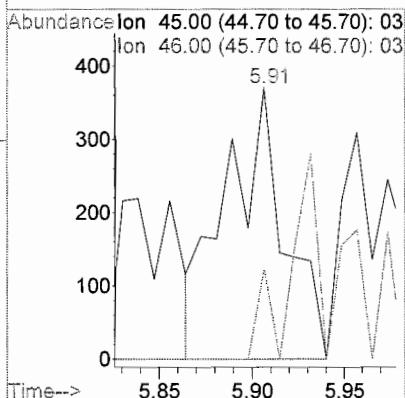
Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration





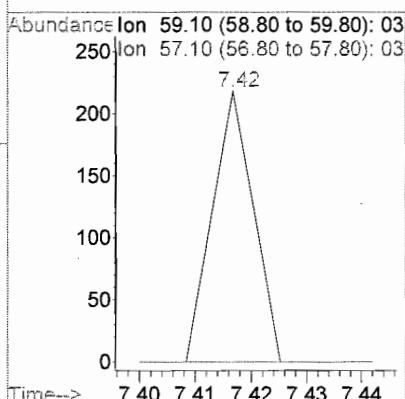
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 Ethanol  
 Concen: 19.00 ug/L  
 RT: 5.91 min Scan# 221  
 Delta R.T. 0.01 min  
 Lab File: 03161112.D  
 Acq: 16 Mar 2011 2:27 pm

Tgt Ion: 45 Resp: 810  
 Ion Ratio Lower Upper  
 45 100  
 46 35.1 17.5 57.5



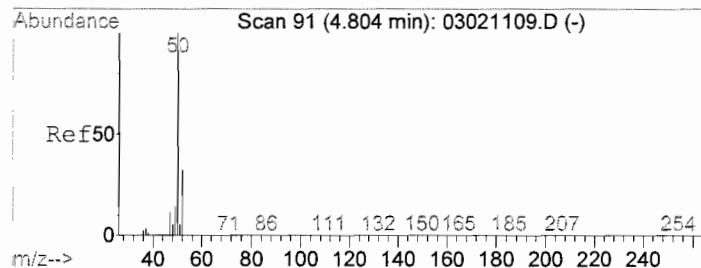
#3  
 tert-Butanol (TBA)  
 Concen: Below Cal  
 RT: 7.42 min Scan# 400  
 Delta R.T. -0.00 min  
 Lab File: 03161112.D  
 Acq: 16 Mar 2011 2:27 pm

Tgt Ion: 59 Resp: 110  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 5.0 7.6#

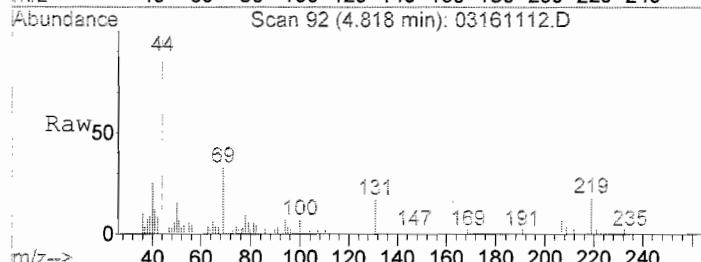


2/2

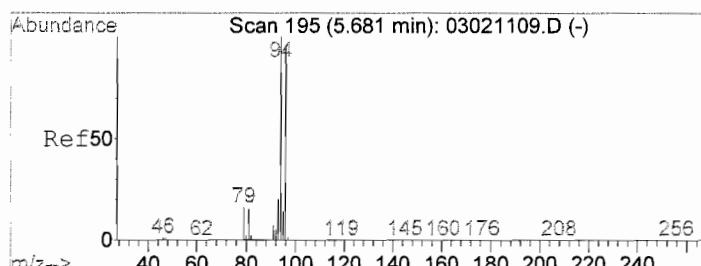
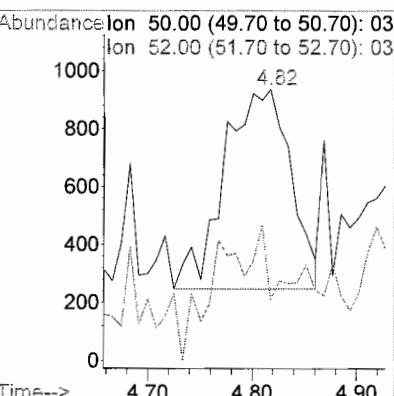
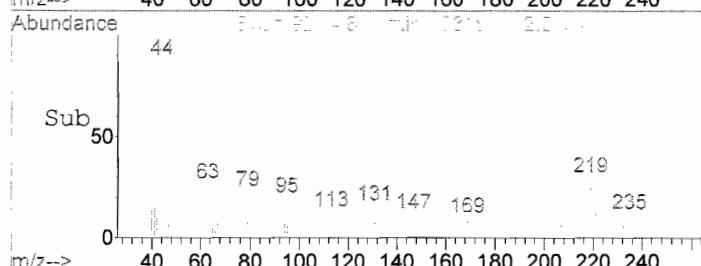




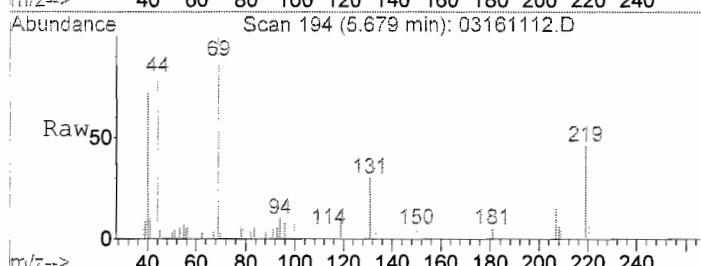
#6  
Chloromethane  
Concen: 0.22 ug/L  
RT: 4.82 min Scan# 92  
Delta R.T. 0.04 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm



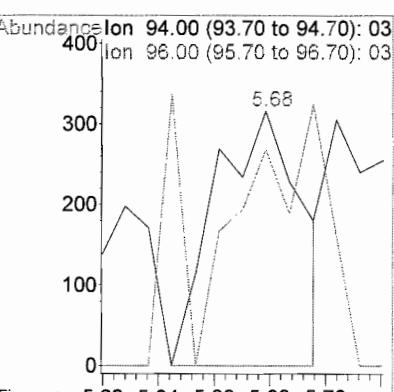
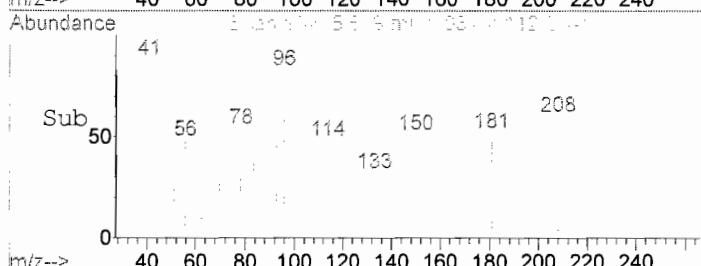
Tgt Ion: 50 Resp: 3056  
Ion Ratio Lower Upper  
50 100  
52 25.9 13.2 53.2



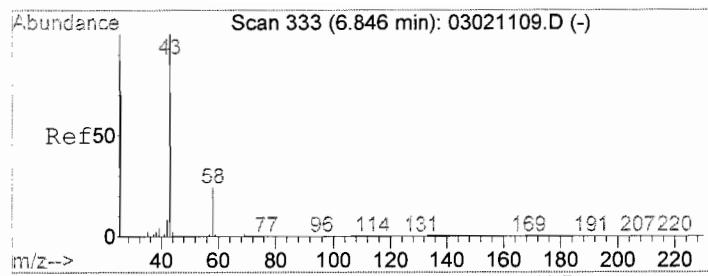
#8  
Bromomethane  
Concen: 0.88 ug/L  
RT: 5.68 min Scan# 194  
Delta R.T. 0.02 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm



Tgt Ion: 94 Resp: 679  
Ion Ratio Lower Upper  
94 100  
96 97.2 79.5 119.3

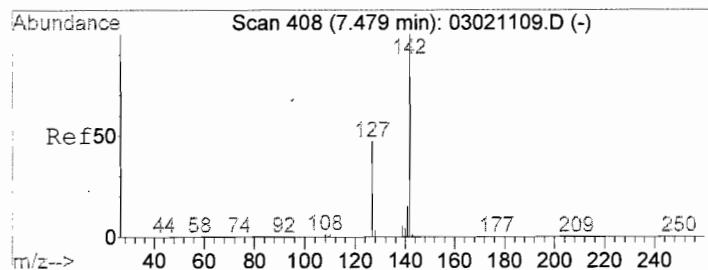
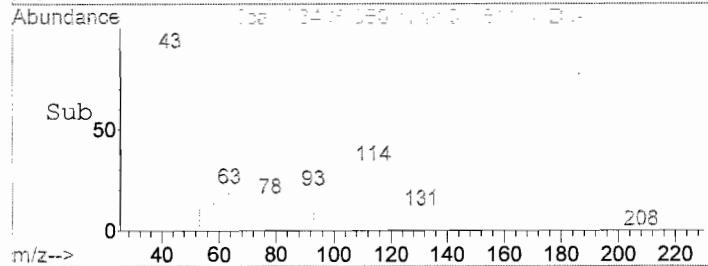
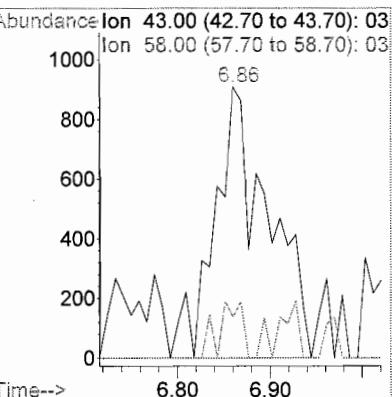
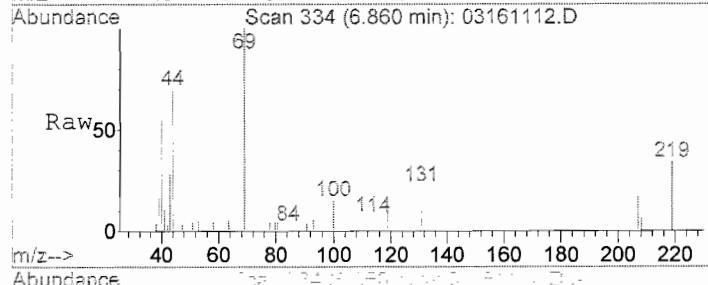


Sign



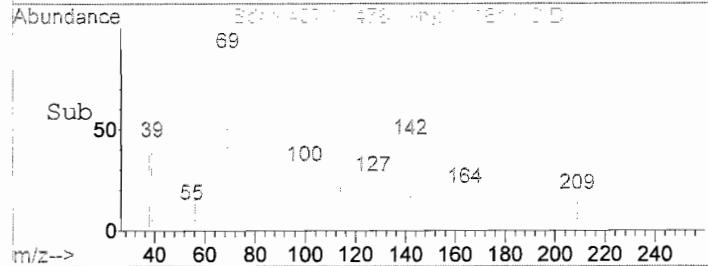
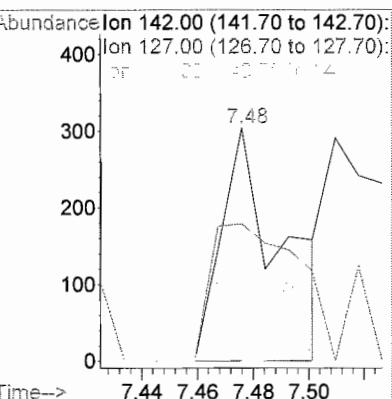
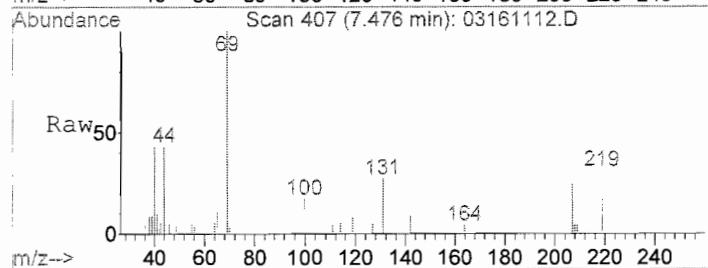
#11  
Acetone  
Concen: 1.10 ug/L  
RT: 6.86 min Scan# 334  
Delta R.T. 0.03 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm

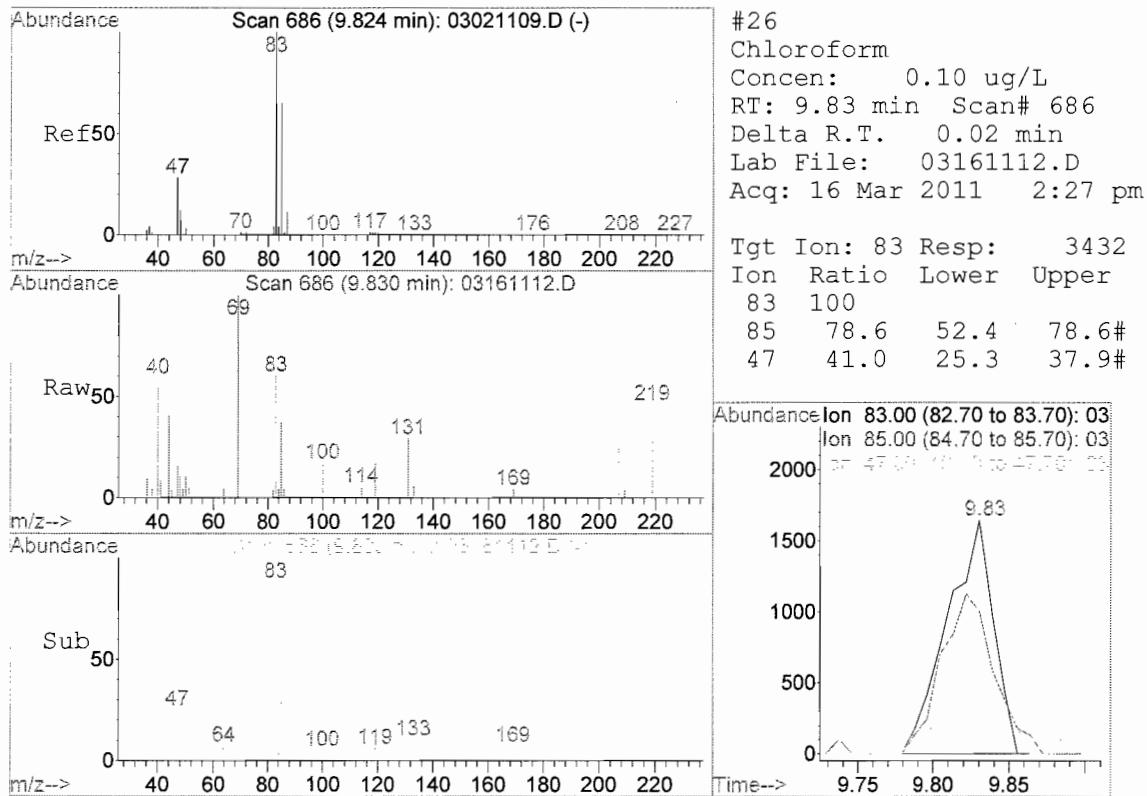
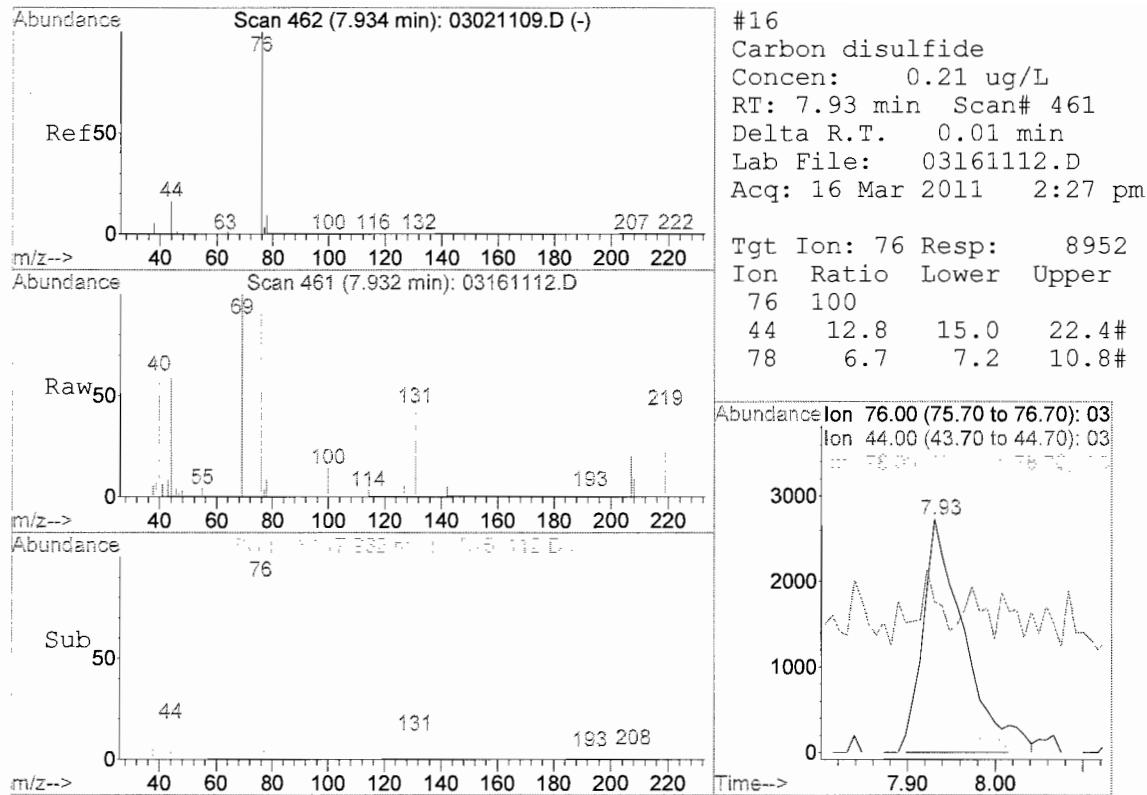
Tgt Ion: 43 Resp: 3649  
Ion Ratio Lower Upper  
43 100  
58 9.2 17.0 25.6#



#12  
Iodomethane  
Concen: 1.82 ug/L  
RT: 7.48 min Scan# 407  
Delta R.T. 0.02 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm

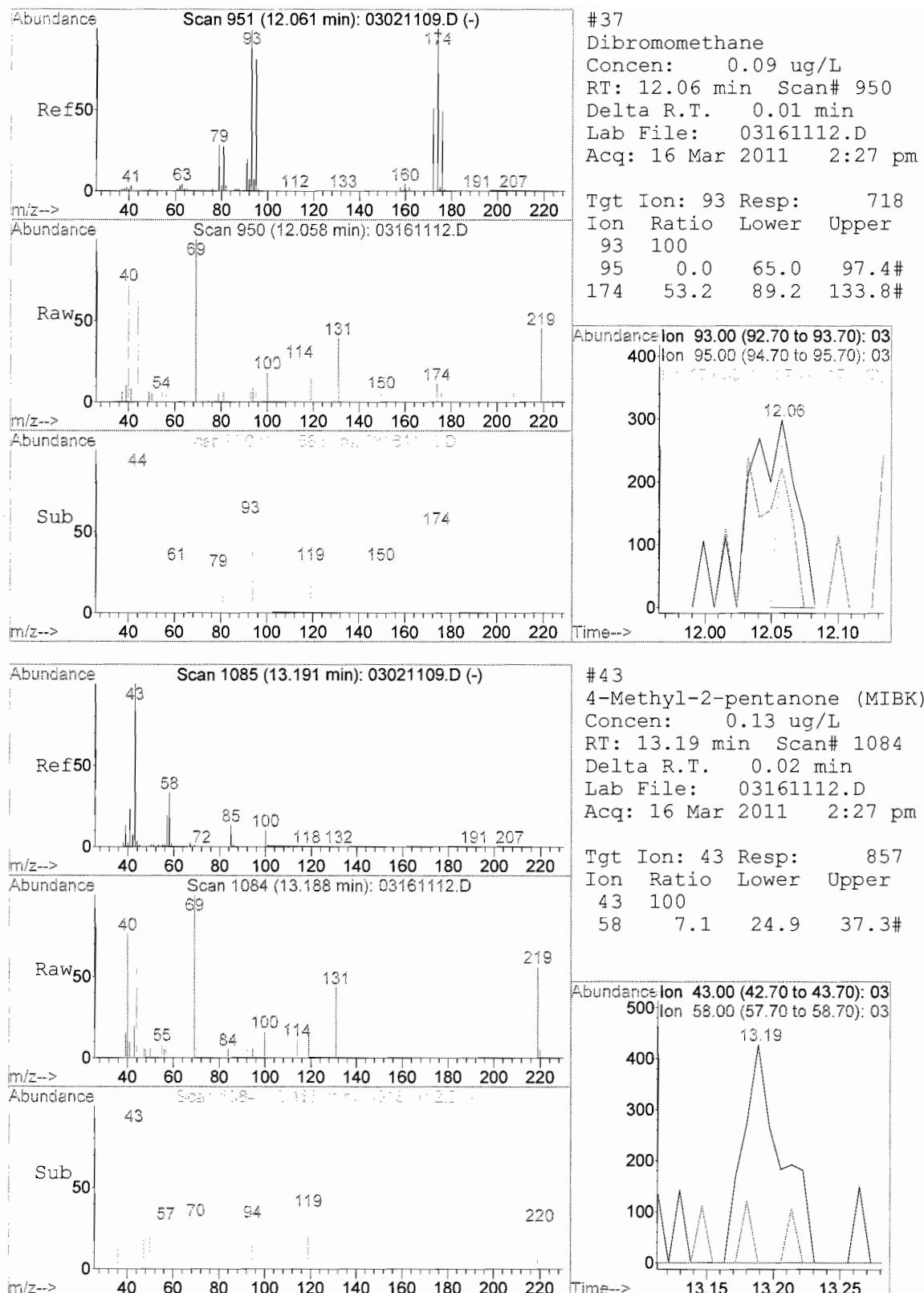
Tgt Ion: 142 Resp: 450  
Ion Ratio Lower Upper  
142 100  
127 100.9 44.9 67.3#  
141 12.0 13.1 19.7#

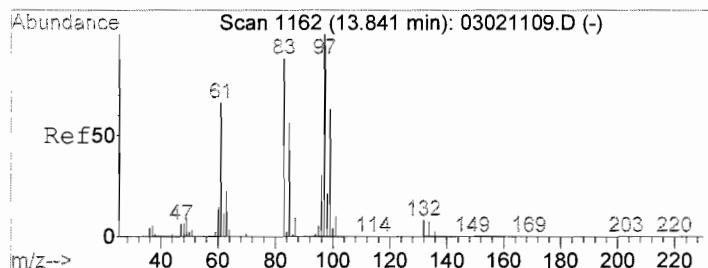




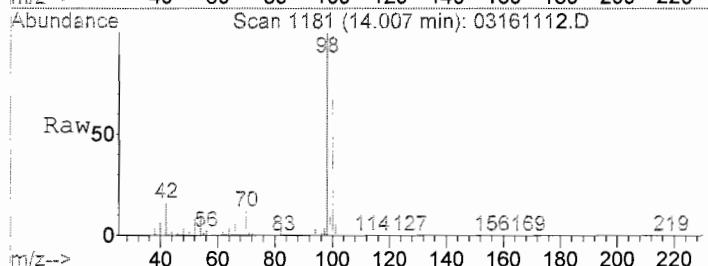
M

ML

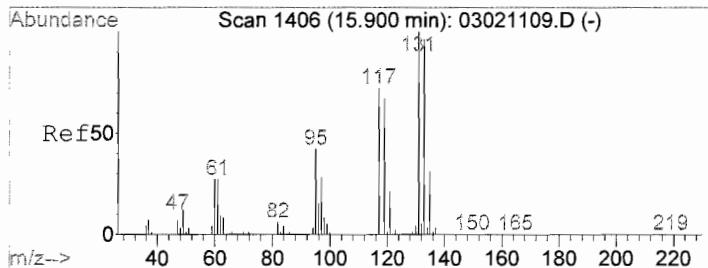
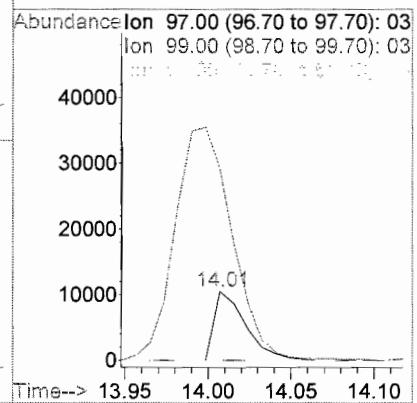
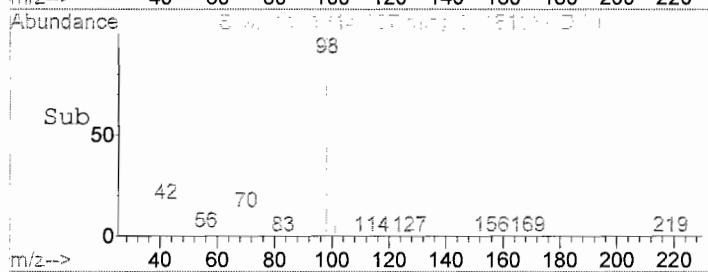




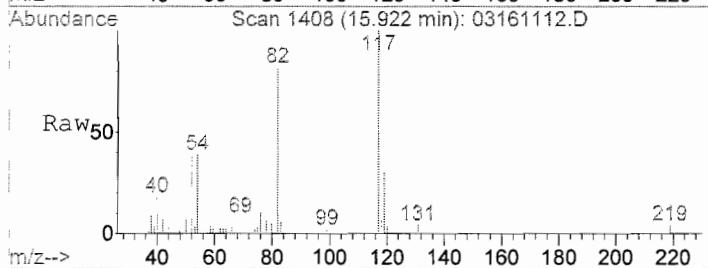
#45  
1,1,2-Trichloroethane  
Concen: 1.54 ug/L  
RT: 14.01 min Scan# 1181  
Delta R.T. 0.18 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm



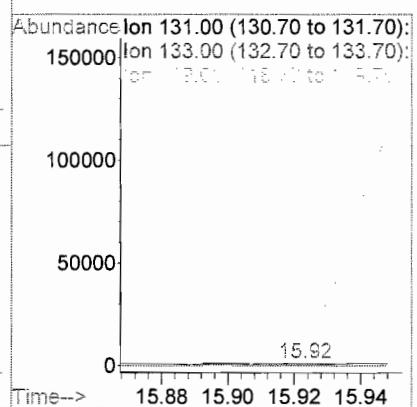
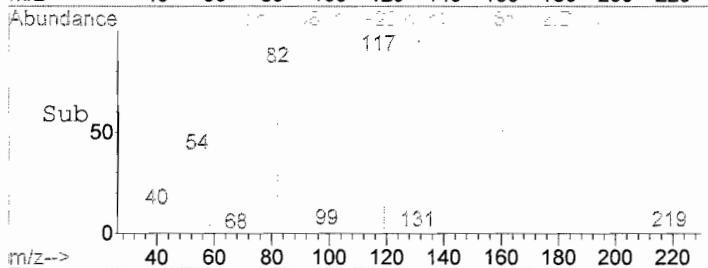
Tgt Ion: 97 Resp: 13864  
Ion Ratio Lower Upper  
97 100  
99 613.0 50.6 76.0#  
61 0.5 60.0 90.0#

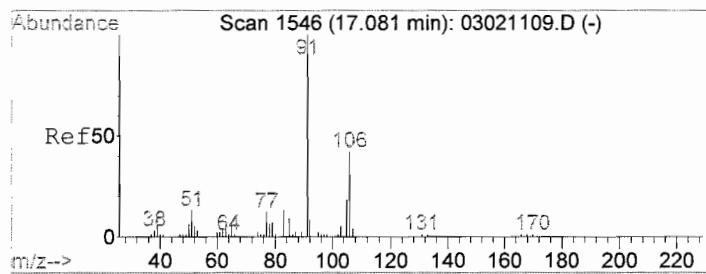


#54  
1,1,1,2-Tetrachloroethane  
Concen: 0.09 ug/L  
RT: 15.92 min Scan# 1408  
Delta R.T. 0.04 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm



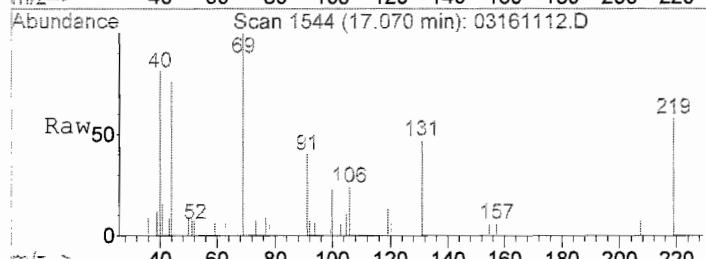
Tgt Ion: 131 Resp: 1330  
Ion Ratio Lower Upper  
131 100  
133 5.9 77.7 116.5#  
119 0.0 53.0 79.4#



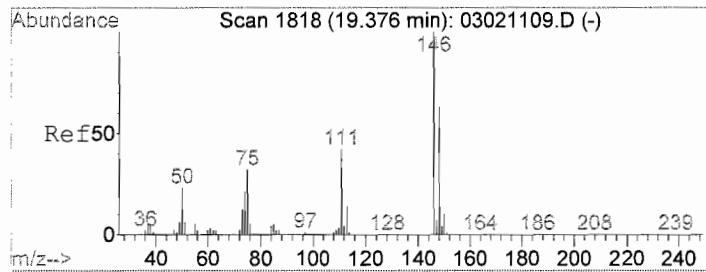
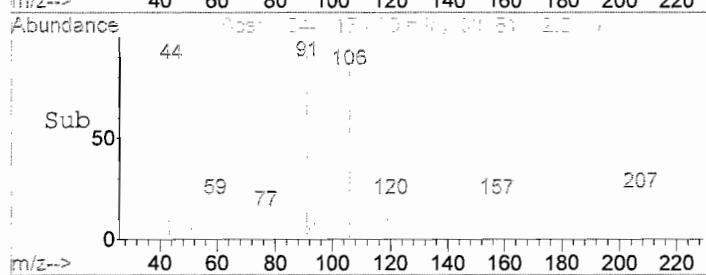
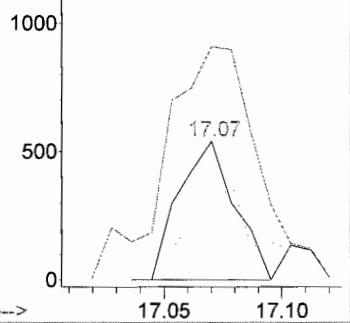


#59  
o-Xylene  
Concen: Below Cal  
RT: 17.07 min Scan# 1544  
Delta R.T. 0.01 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm

Tgt Ion:106 Resp: 889  
Ion Ratio Lower Upper  
106 100  
91 285.8 222.7 262.7#  
105 84.8 22.9 62.9#

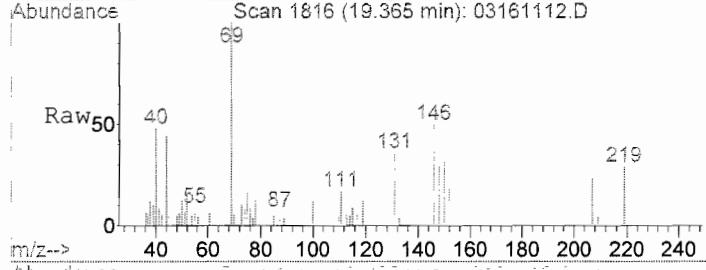


Abundance Ion 106.00 (105.70 to 106.70):  
Ion 91.00 (90.70 to 91.70): 03

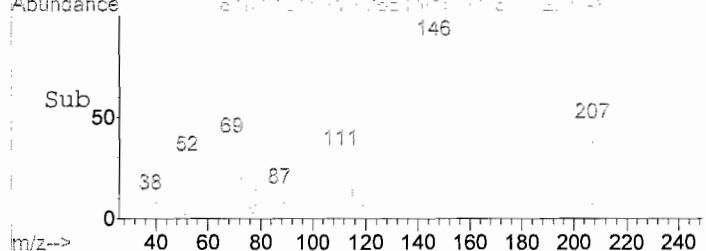
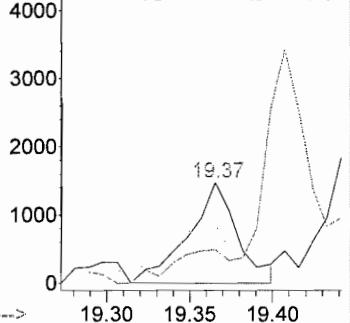


#74  
1,3-Dichlorobenzene  
Concen: 0.10 ug/L  
RT: 19.37 min Scan# 1818  
Delta R.T. 0.01 min  
Lab File: 03161112.D  
Acq: 16 Mar 2011 2:27 pm

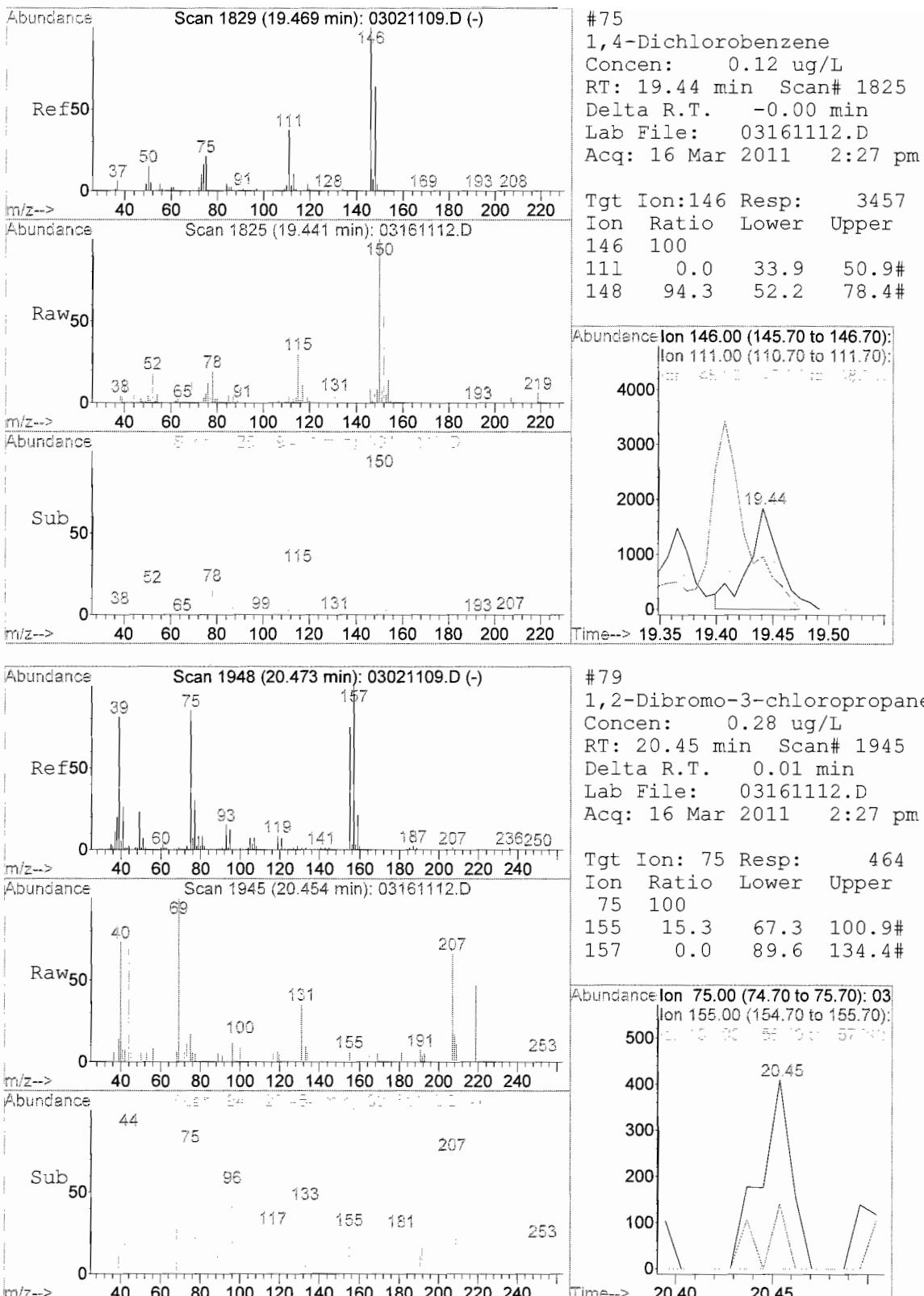
Tgt Ion:146 Resp: 3079  
Ion Ratio Lower Upper  
146 100  
111 38.3 34.3 51.5  
148 75.0 52.1 78.1

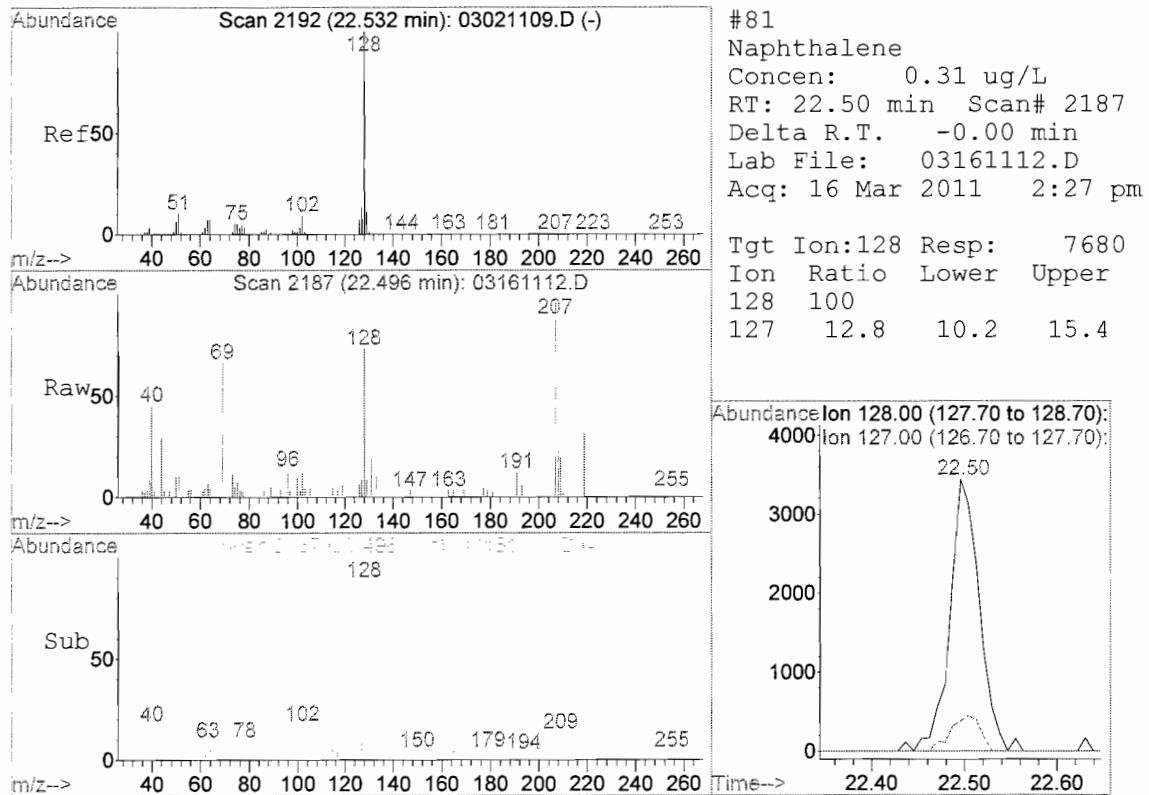
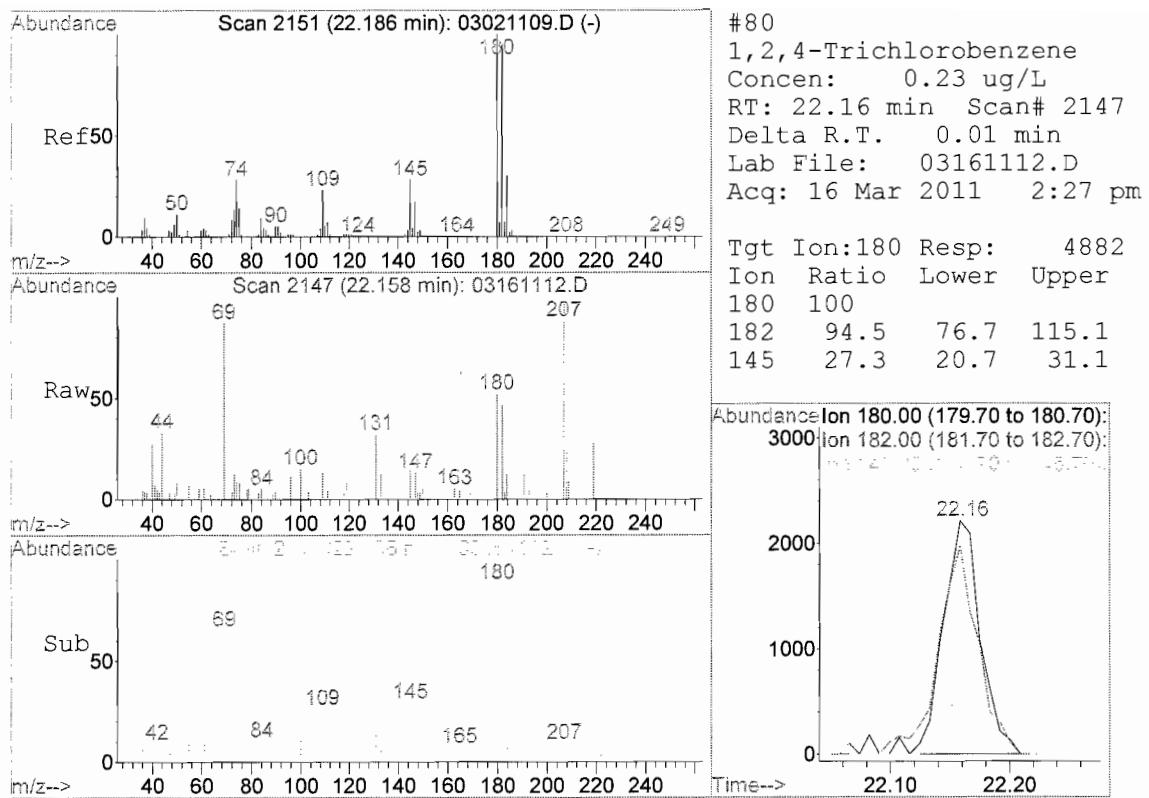


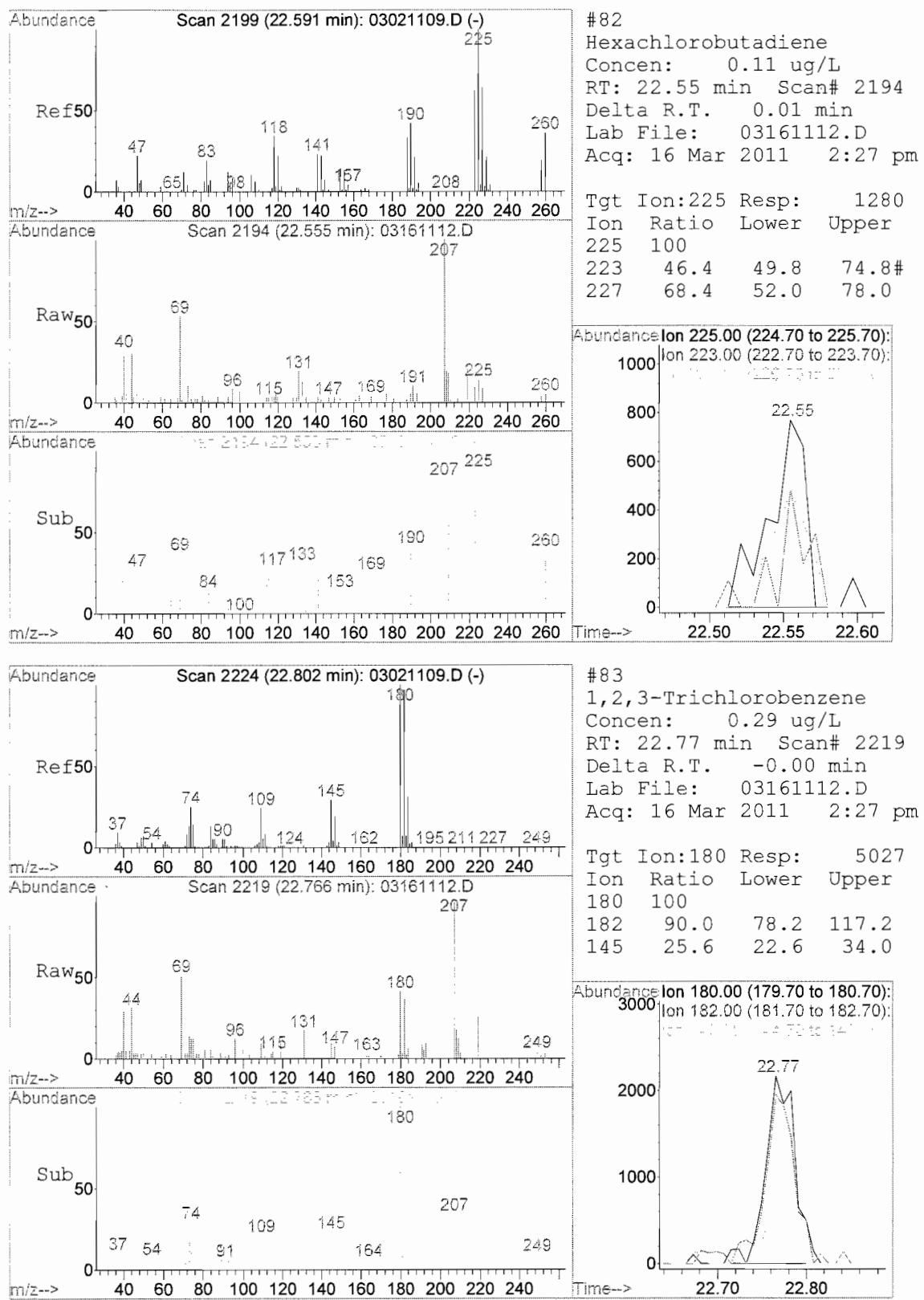
Abundance Ion 146.00 (145.70 to 146.70):  
Ion 111.00 (110.70 to 111.70):



LL

*mlc**M*





## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161121.D Vial: 15  
 Acq On : 16 Mar 2011 7:16 pm Operator: NL  
 Sample : PUC0730-01 Inst : GCMS13  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Mar 17 8:12 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260

Last Update : Mon Mar 14 16:22:34 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

*RL for Ti<sup>+</sup>  
(anyover)*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) TBA-d9	7.31	65	108794	200.00	ug/L	0.00
4) Pentafluorobenzene	10.48	168	689598	25.00	ug/L	0.00
33) 1,4-Difluorobenzene	11.61	114	902956	25.00	ug/L	0.00
48) Chlorobenzene-d5	15.95	117	817006	25.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	19.41	152	489146	25.00	ug/L	0.00

## System Monitoring Compounds

29) Dibromofluoromethane	9.98	113	330795	20.92	ug/L	0.01
Spiked Amount	25.000		Recovery	=	83.68%	
46) Toluene-d8	13.99	98	974215	24.46	ug/L	0.00
Spiked Amount	25.000		Recovery	=	97.84%	
60) 4-Bromofluorobenzene	17.62	95	494209	27.42	ug/L	0.00
Spiked Amount	25.000		Recovery	=	109.68%	

## Target Compounds

				Qvalue	
2) Ethanol	5.92	45	410	9.45 ug/L	75 NT
3) tert-Butanol (TBA)	7.44	59	579	Below Cal #	81 L
6) Chloromethane	4.81	50	1416	0.10 ug/L #	15 LRL
8) Bromomethane	5.68	94	528	0.87 ug/L #	1 NSM
10) Trichlorofluoromethane	6.70	101	7951	0.25 ug/L	90 LRL
11) Acetone	6.87	43	2046	0.60 ug/L #	73 ND
12) Iodomethane	7.46	142	58	1.79 ug/L #	32 NGM
13) 1,1-Dichloroethene	7.42	96	1701	0.11 ug/L	84 LRL
16) Carbon disulfide	7.94	76	6773	0.15 ug/L #	73
24) cis-1,2-dichloroethene	9.56	96	18591	0.95 ug/L	96
26) Chloroform	9.82	83	26398	0.72 ug/L	99
32) (TAME) tert-Amyl methyl eth	11.61	73	12831	0.39 ug/L #	36 NT
36) Benzene	11.33	78	17234	0.30 ug/L	97 LRL
39) Trichloroethene	12.16	95	128026	7.30 ug/L	97
41) 2-Chlorovinylethylether	12.78	63	1048	0.22 ug/L #	74 NT
43) 4-Methyl-2-pentanone (MIBK)	13.02	43	638	0.09 ug/L #	44 NOS
45) 1,1,2-Trichloroethane	14.01	97	11435	1.21 ug/L #	16 WRT
47) Toluene	14.10	92	34628	1.01 ug/L	97 NR
53) Tetrachloroethene	15.08	164	5735	0.40 ug/L	99 LRL
56) Ethylbenzene	16.25	91	18584	0.28 ug/L #	85 LRL
57) m,p-Xylenes	16.51	106	20285	0.86 ug/L	96 NR
59) o-Xylene	17.07	106	11903	0.33 ug/L	98 L
72) 1,2,4-Trimethylbenzene	19.11	105	19272	0.34 ug/L	97 LRL
79) 1,2-Dibromo-3-chloropropan	20.49	75	378	0.22 ug/L #	8
81) Naphthalene	22.50	128	49879	1.94 ug/L	98 L

*NT/RL/*

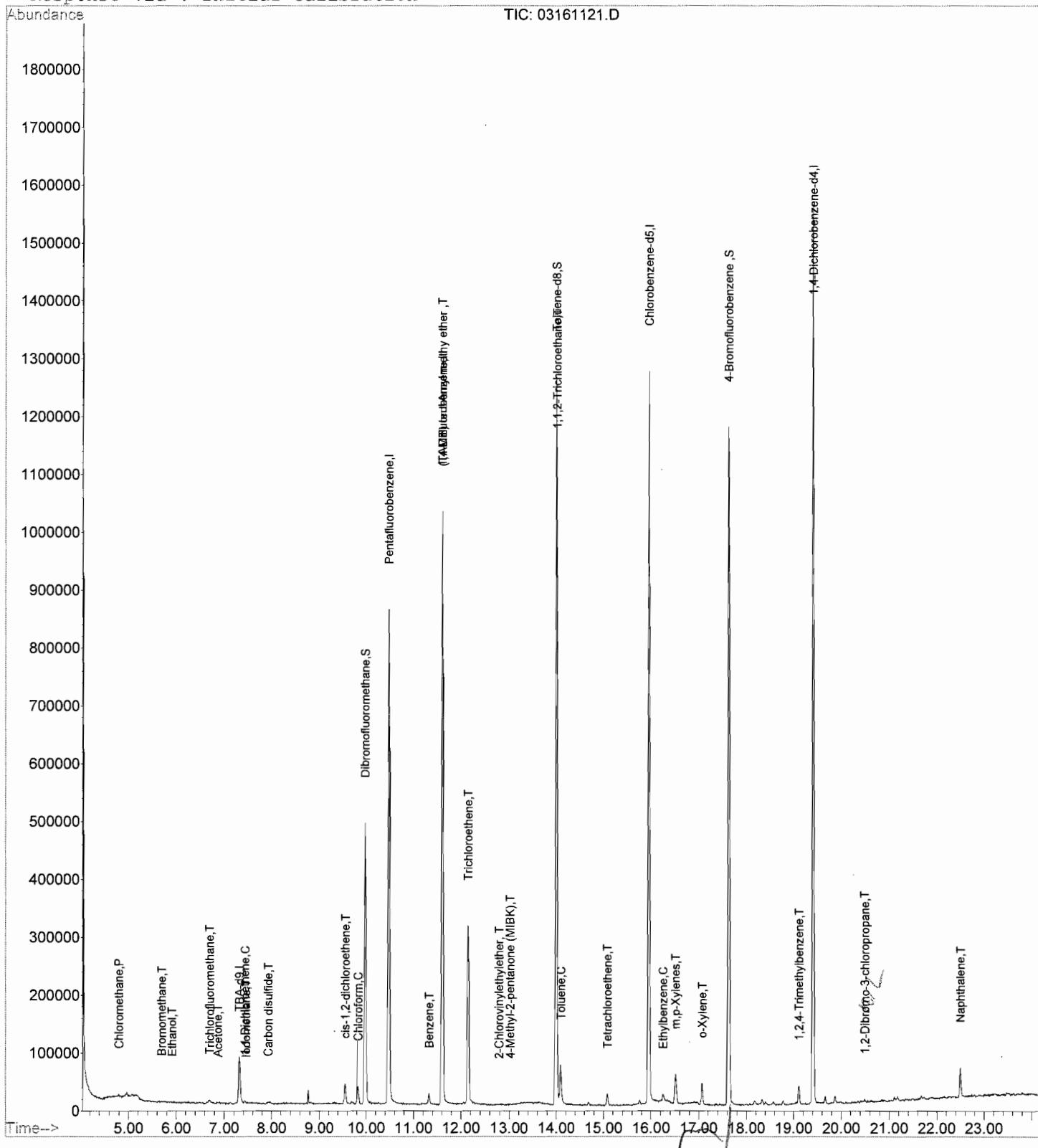
*M / 11111*

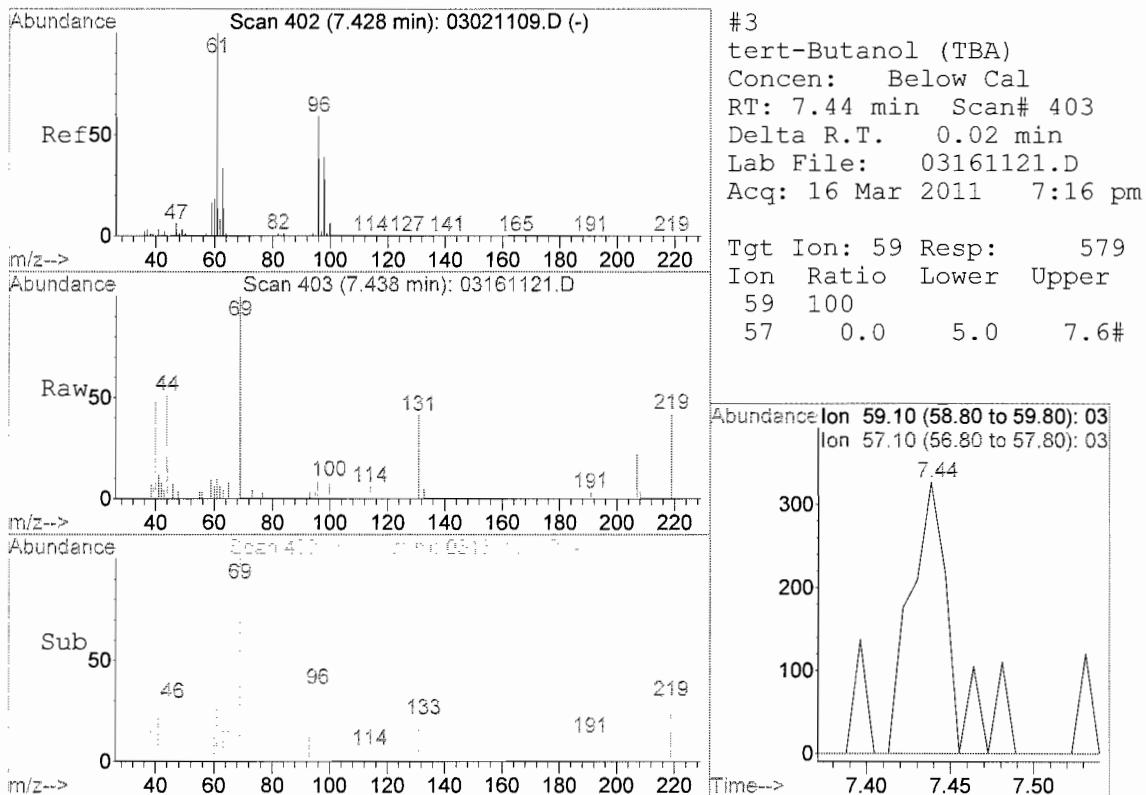
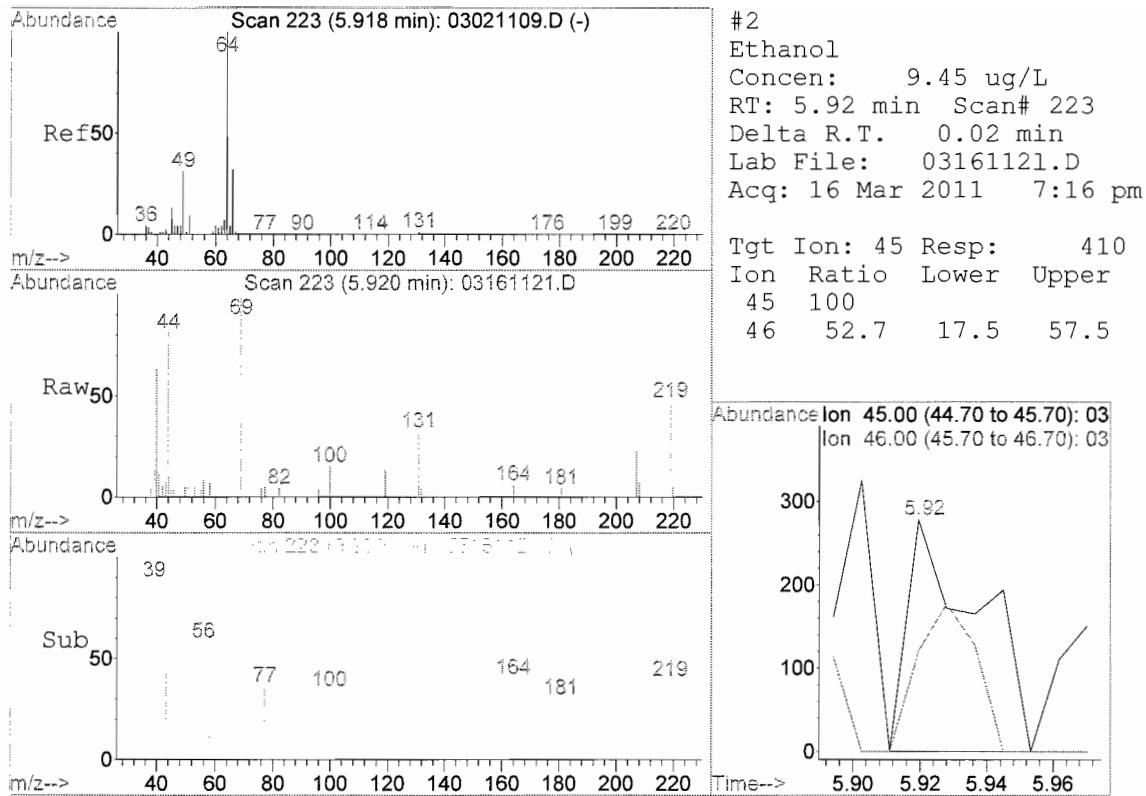
(#) = qualifier out of range (m) = manual integration  
 03161121.D 031411.M Thu Mar 17 11:24:50 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS13\DATA\031611\03161121.D Vial: 15  
 Acq On : 16 Mar 2011 7:16 pm Operator: NL  
 Sample : PUC0730-01 Inst : GCMS13  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Mar 17 8:12 2011 Quant Results File: 031411.RES

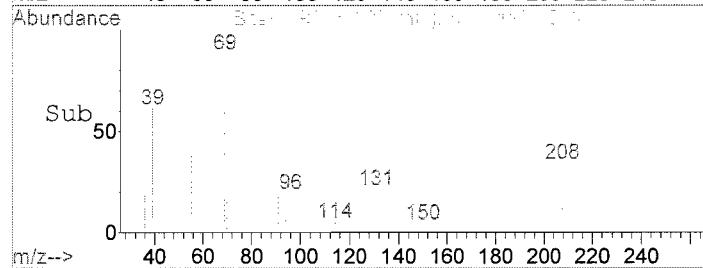
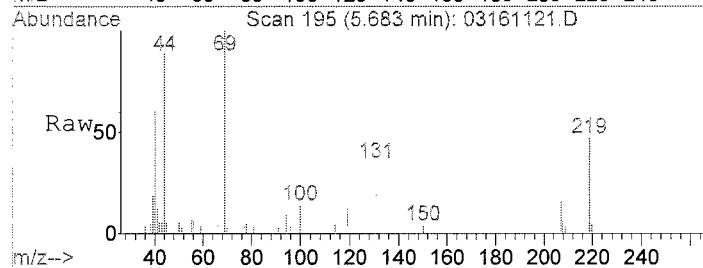
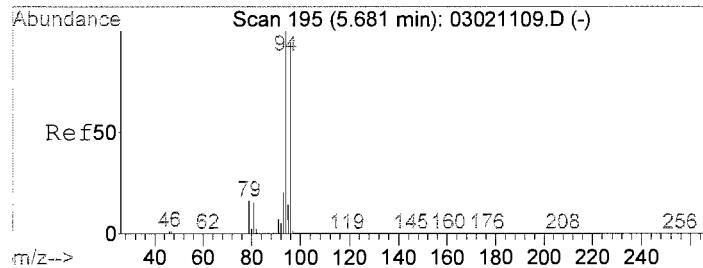
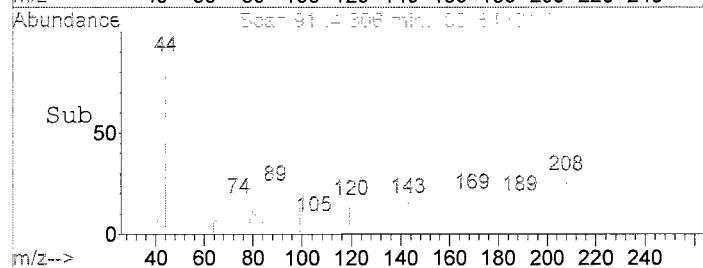
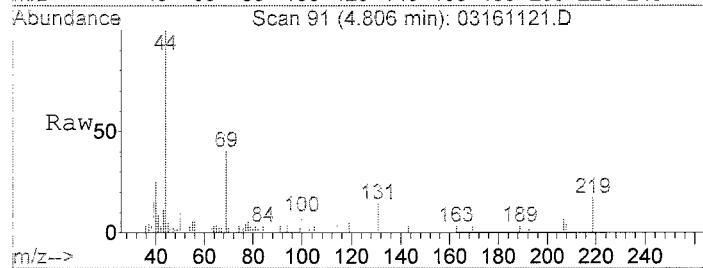
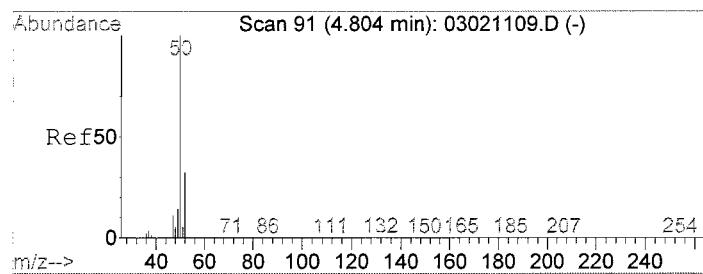
Method : C:\HPCHEM\1\GCMS13\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260  
 Last Update : Mon Mar 14 16:22:34 2011  
 Response via : Initial Calibration





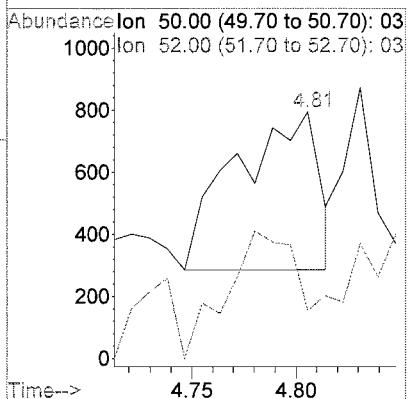
✓

✓



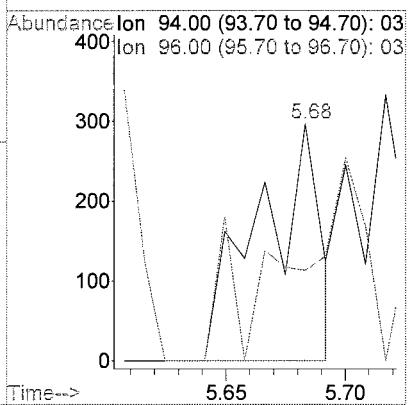
#6  
Chloromethane  
Concen: 0.10 ug/L  
RT: 4.81 min Scan# 91  
Delta R.T. 0.03 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

Tgt Ion: 50 Resp: 1416  
Ion Ratio Lower Upper  
50 100  
52 81.2 13.2 53.2#



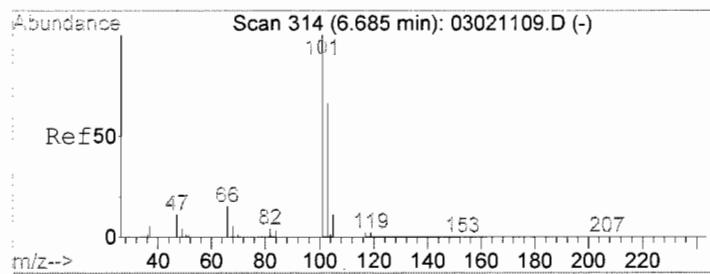
#8  
Bromomethane  
Concen: 0.87 ug/L  
RT: 5.68 min Scan# 195  
Delta R.T. 0.02 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

Tgt Ion: 94 Resp: 528  
Ion Ratio Lower Upper  
94 100  
96 0.0 79.5 119.3#



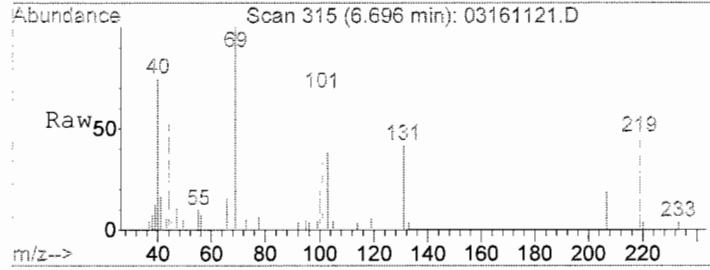
Norm

au

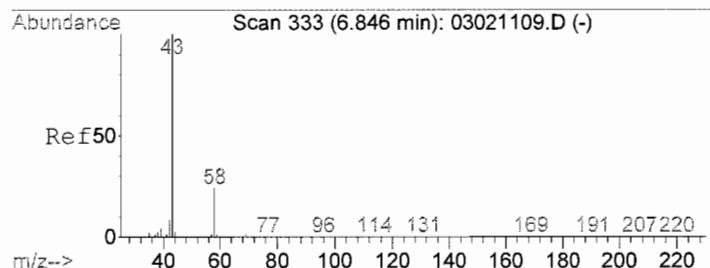
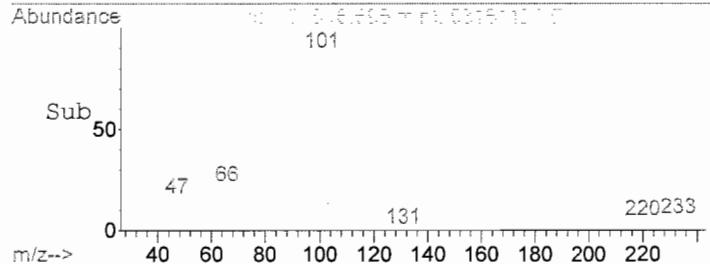
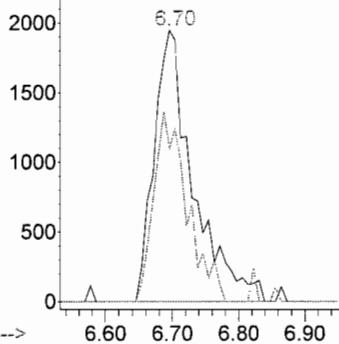


#10  
Trichlorofluoromethane  
Concen: 0.25 ug/L  
RT: 6.70 min Scan# 315  
Delta R.T. 0.02 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

Tgt Ion: 101 Resp: 7951  
Ion Ratio Lower Upper  
101 100  
103 56.4 51.5 77.3

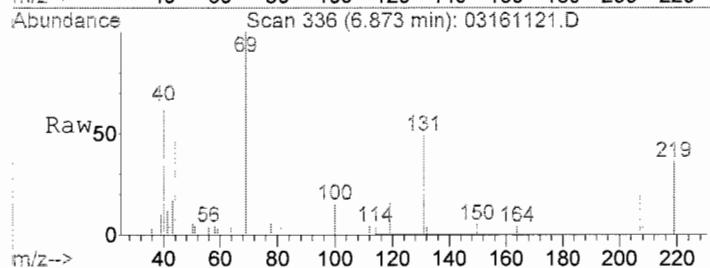


Abundance Ion 101.00 (100.70 to 101.70):  
Ion 103.00 (102.70 to 103.70):

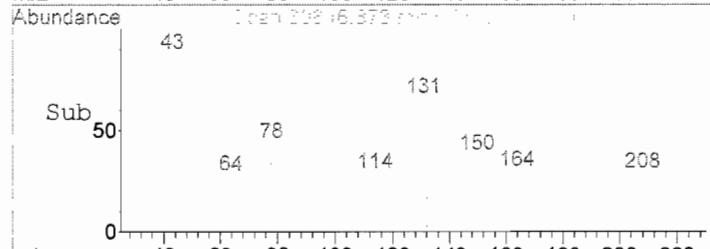
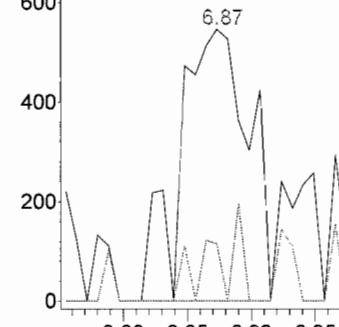


#11  
Acetone  
Concen: 0.60 ug/L  
RT: 6.87 min Scan# 336  
Delta R.T. 0.05 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

Tgt Ion: 43 Resp: 2046  
Ion Ratio Lower Upper  
43 100  
58 8.6 17.0 25.6#

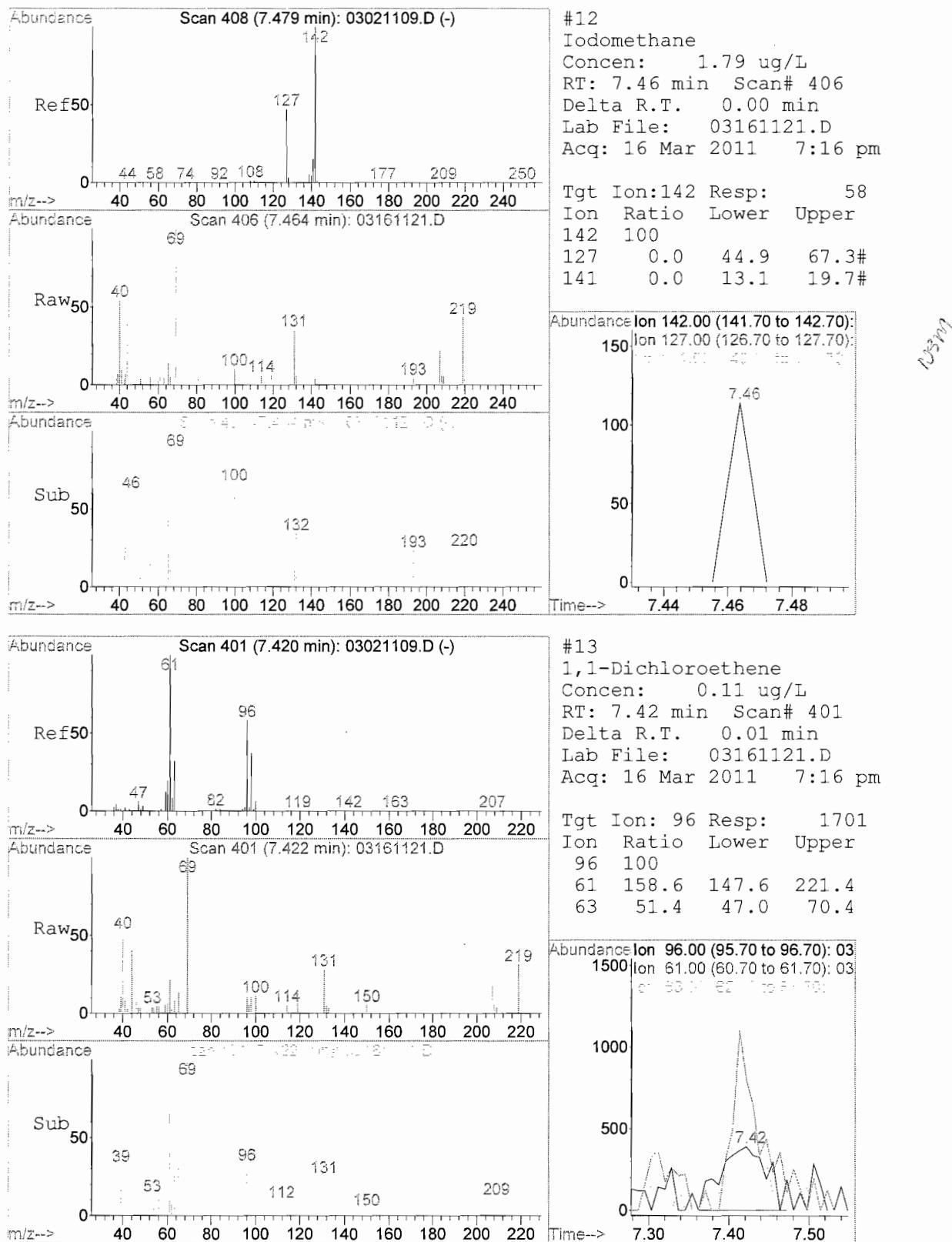


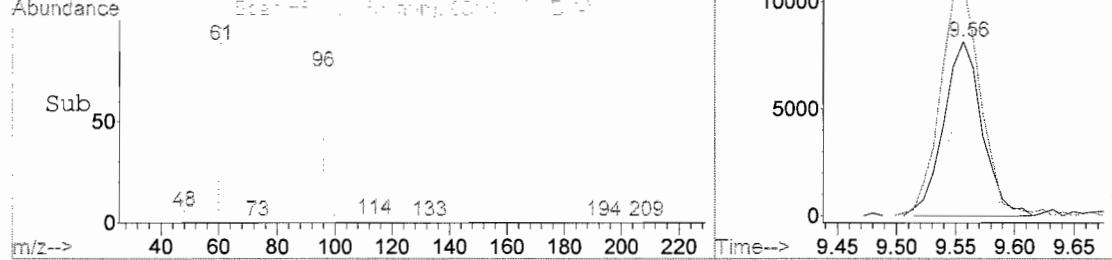
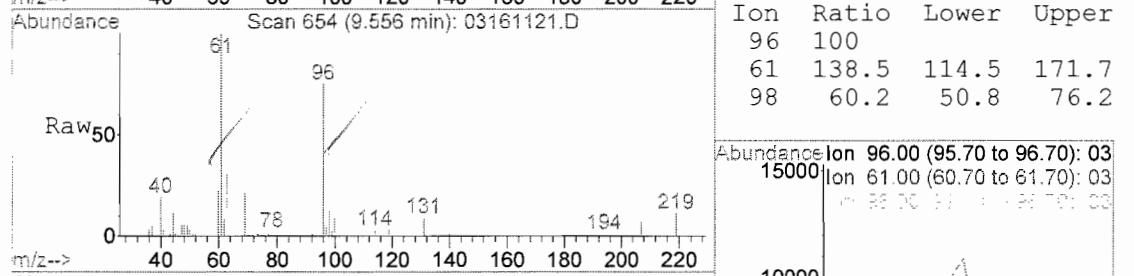
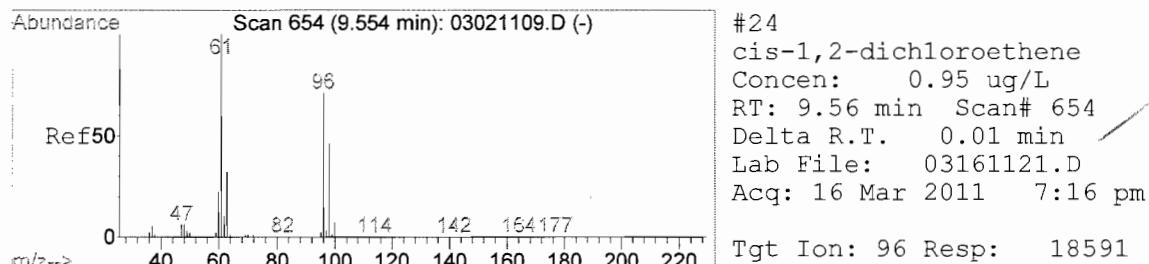
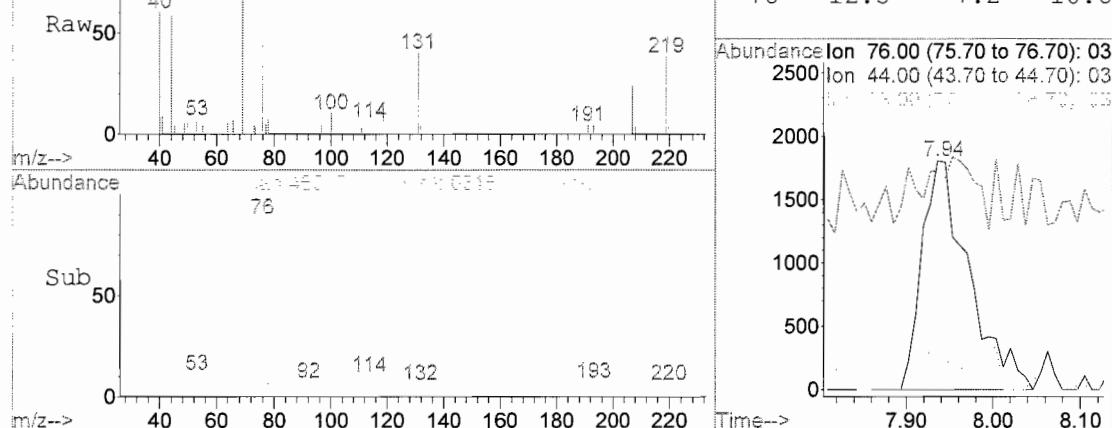
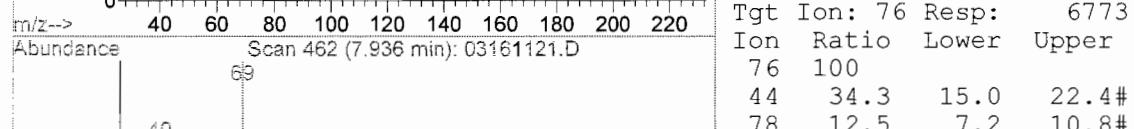
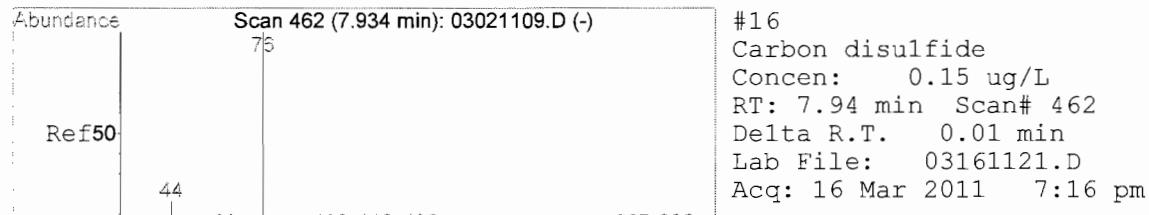
Abundance Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03

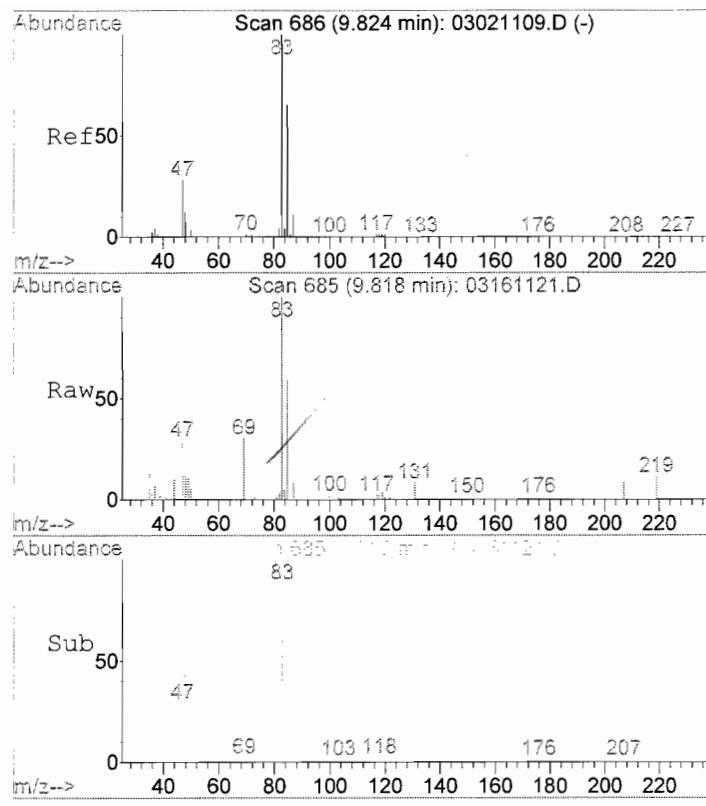


Rez



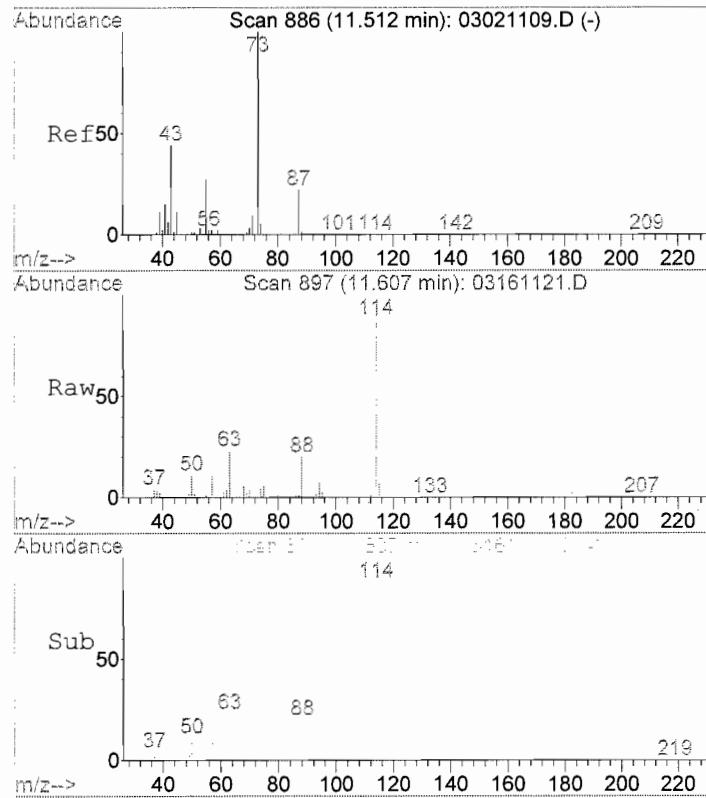
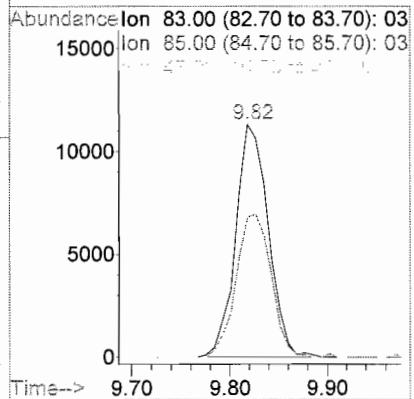






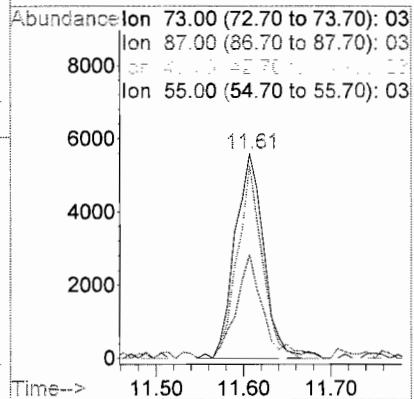
#26  
Chloroform  
Concen: 0.72 ug/L  
RT: 9.82 min Scan# 685  
Delta R.T. 0.00 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

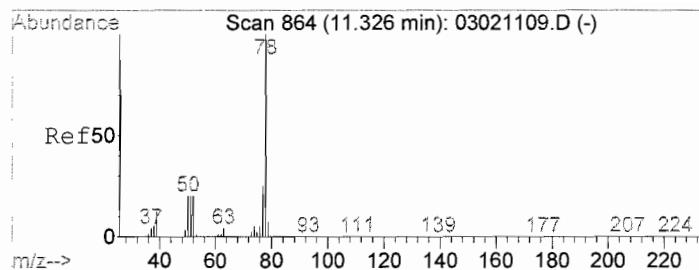
Tgt Ion: 83 Resp: 26398  
Ion Ratio Lower Upper  
83 100  
85 65.9 52.4 78.6  
47 30.7 25.3 37.9



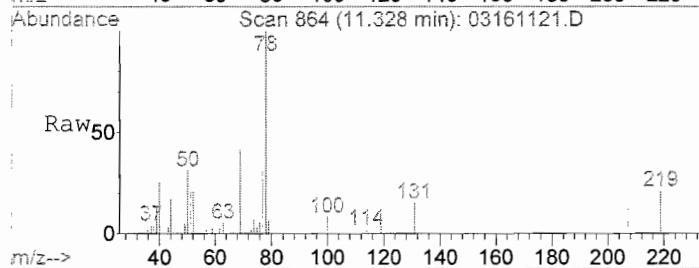
#32  
(TAME) tert-Amyl methyl ether  
Concen: 0.39 ug/L  
RT: 11.61 min Scan# 897  
Delta R.T. 0.10 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

Tgt Ion: 73 Resp: 12831  
Ion Ratio Lower Upper  
73 100  
87 80.8 4.2 44.2#  
43 9.9 26.6 66.6#  
55 47.6 8.3 48.3

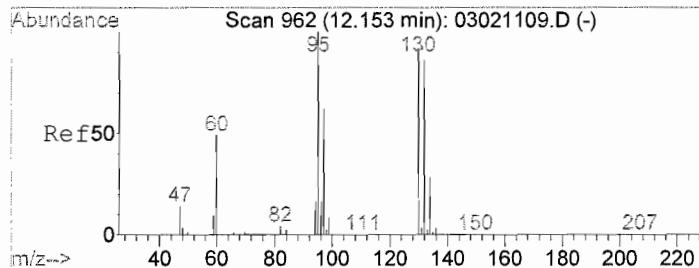
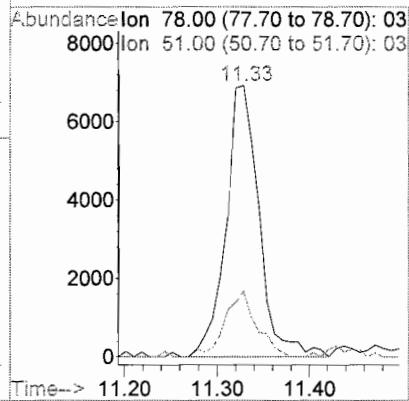
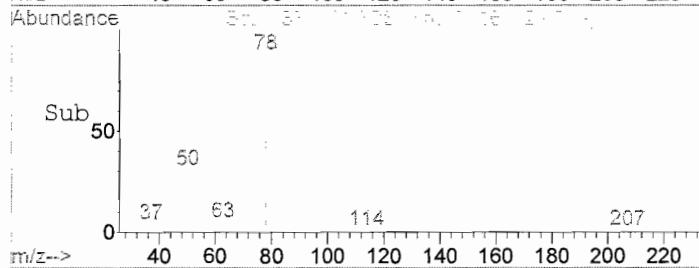




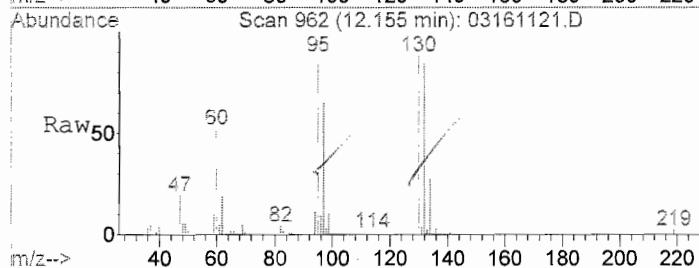
#36  
Benzene  
Concen: 0.30 ug/L  
RT: 11.33 min Scan# 864  
Delta R.T. 0.01 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm



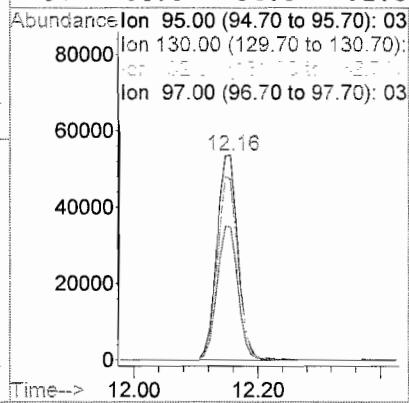
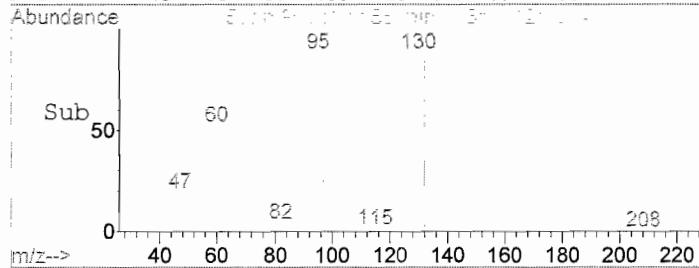
Tgt Ion: 78 Resp: 17234  
Ion Ratio Lower Upper  
78 100  
51 23.3 17.5 26.3

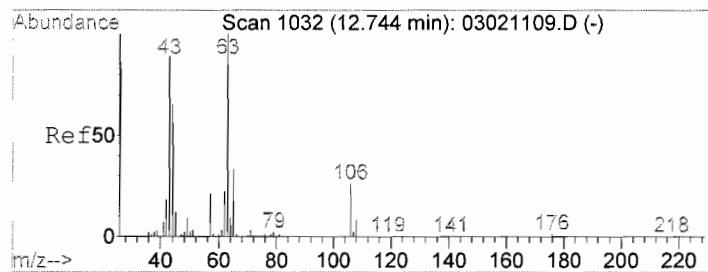


#39  
Trichloroethene  
Concen: 7.30 ug/L  
RT: 12.16 min Scan# 962  
Delta R.T. 0.01 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

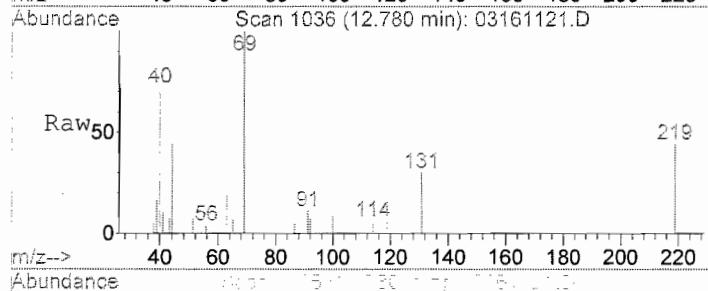


Tgt Ion: 95 Resp: 128026  
Ion Ratio Lower Upper  
95 100  
130 85.7 70.3 105.5  
132 82.2 68.5 102.7  
97 64.3 54.3 81.5

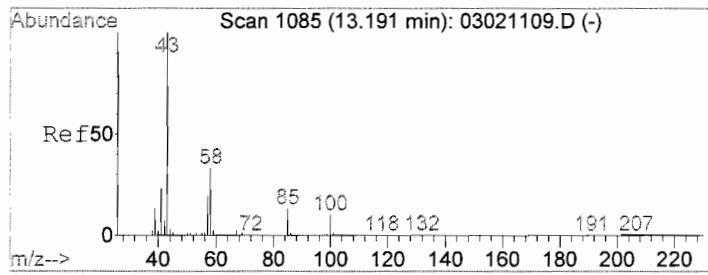
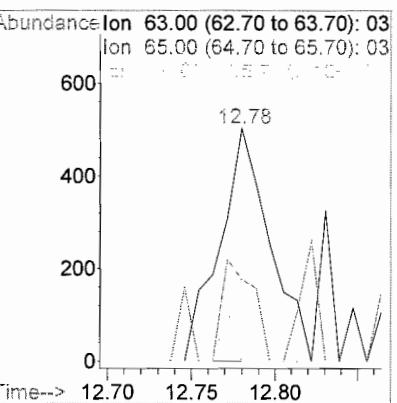
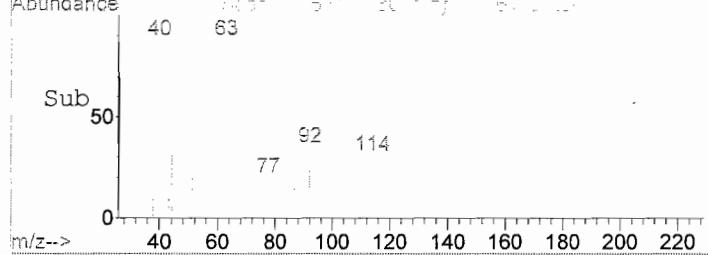




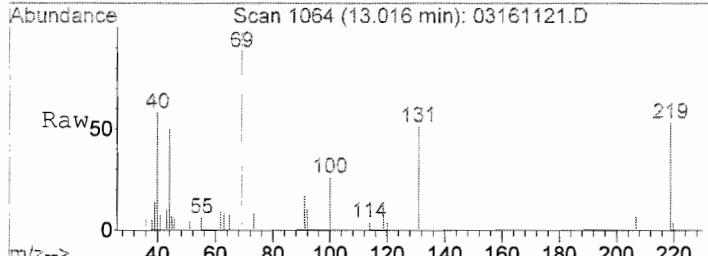
#41  
2-Chlorovinylethylether  
Concen: 0.22 ug/L  
RT: 12.78 min Scan# 1036  
Delta R.T. 0.05 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm



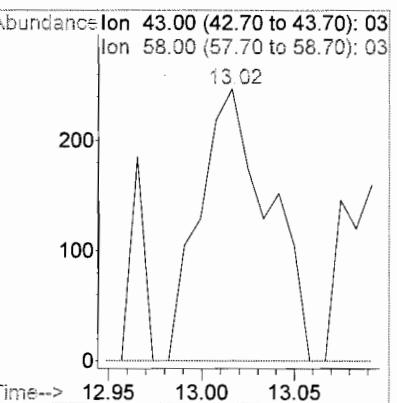
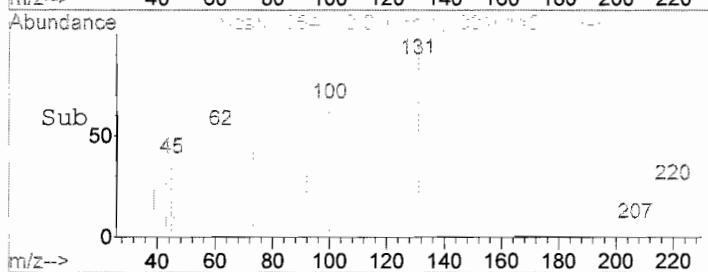
Tgt Ion: 63 Resp: 1048  
Ion Ratio Lower Upper  
63 100  
65 26.8 25.5 38.3  
106 5.3 23.0 34.6#

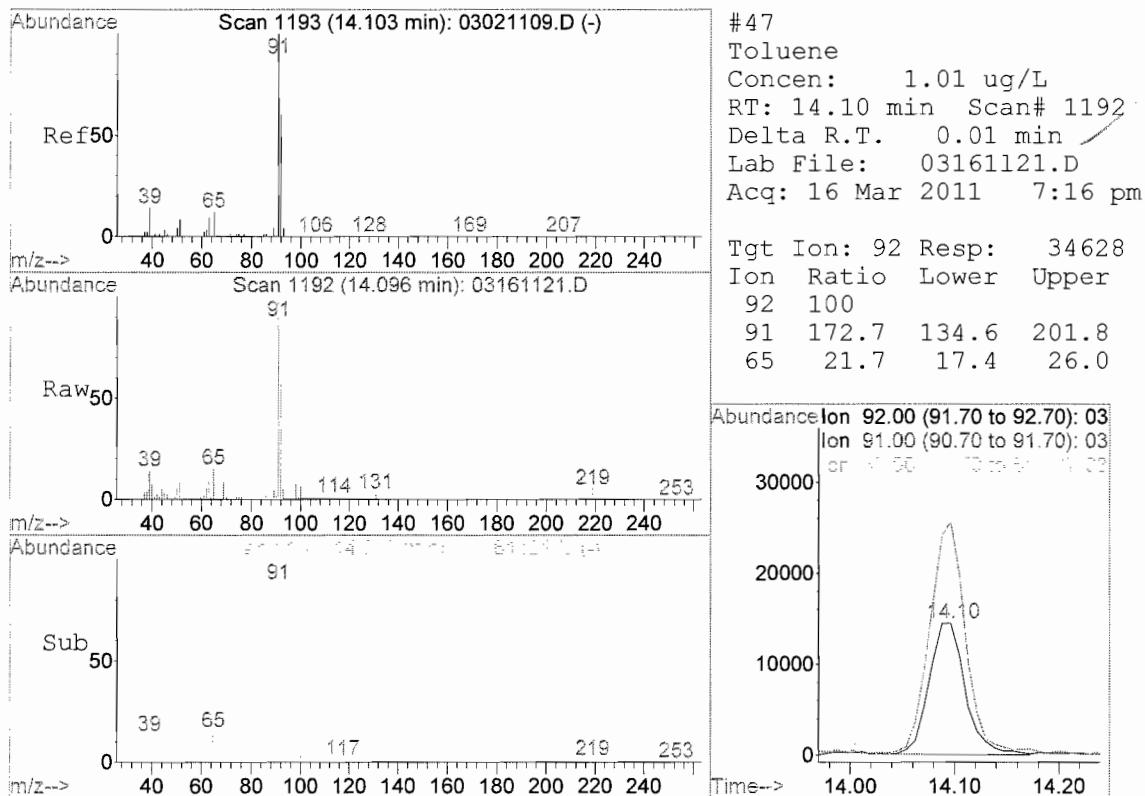
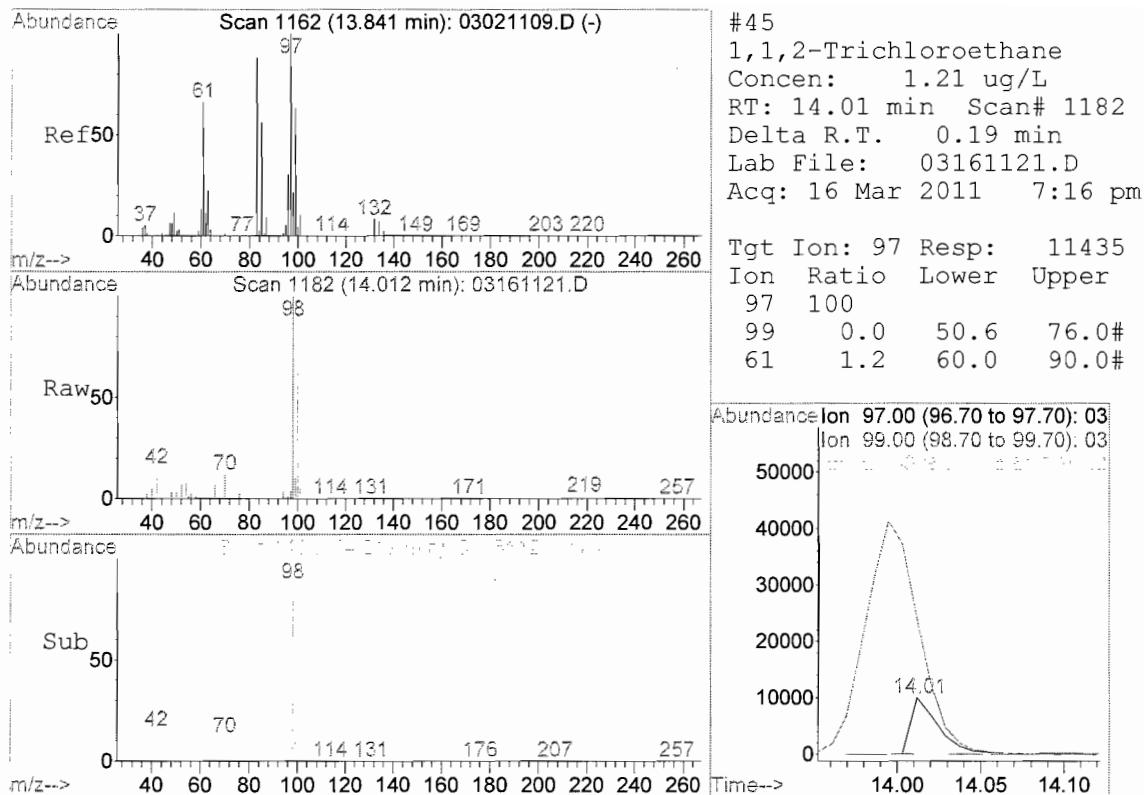


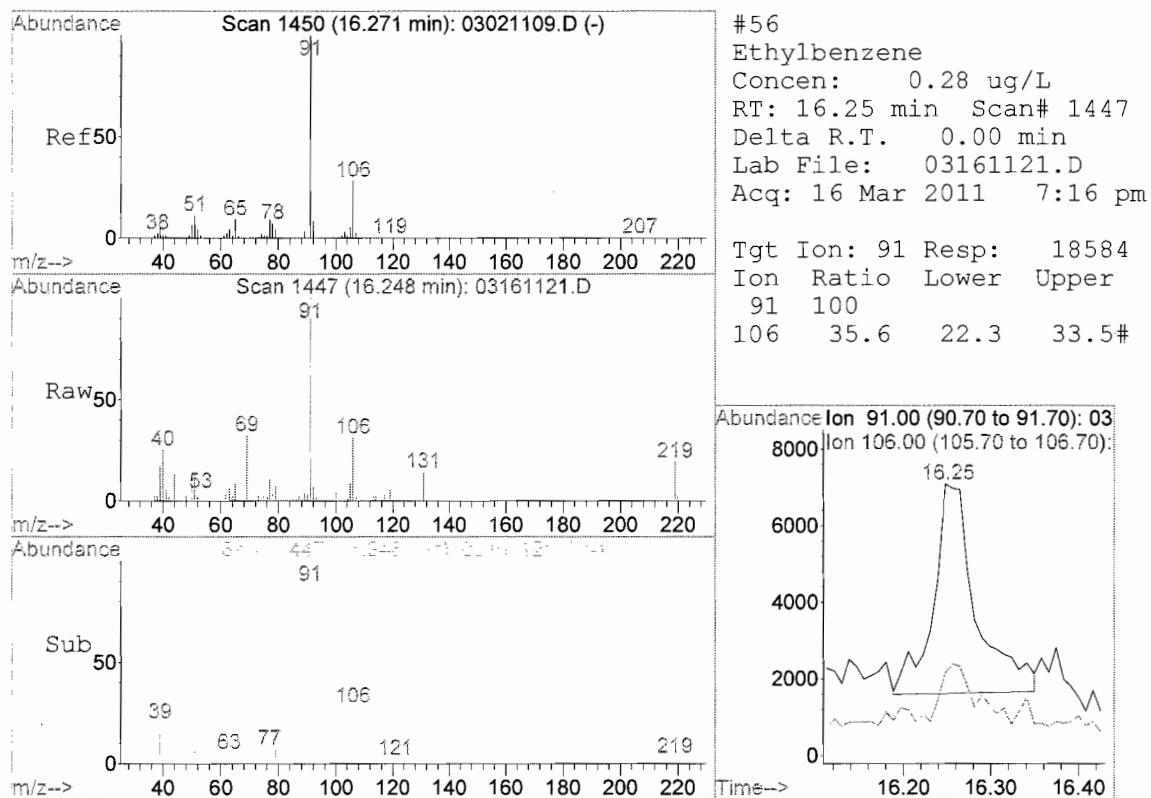
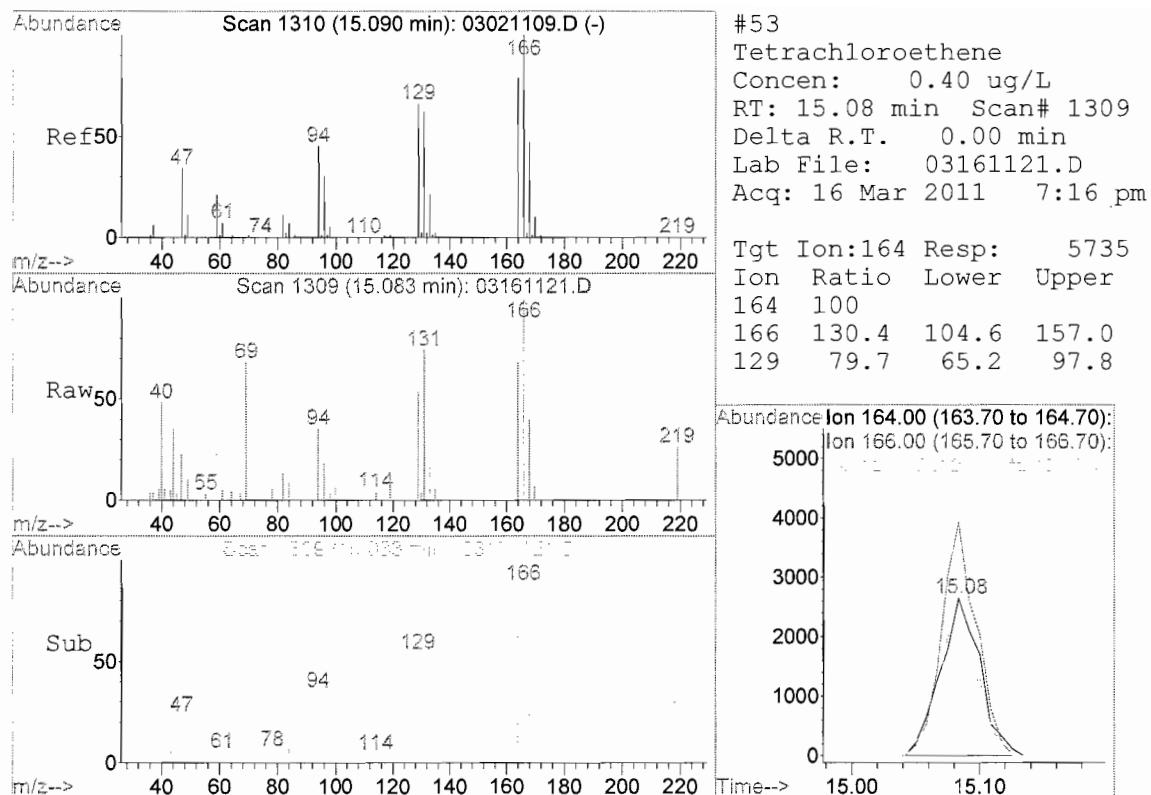
#43  
4-Methyl-2-pentanone (MIBK)  
Concen: 0.09 ug/L  
RT: 13.02 min Scan# 1064  
Delta R.T. -0.16 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

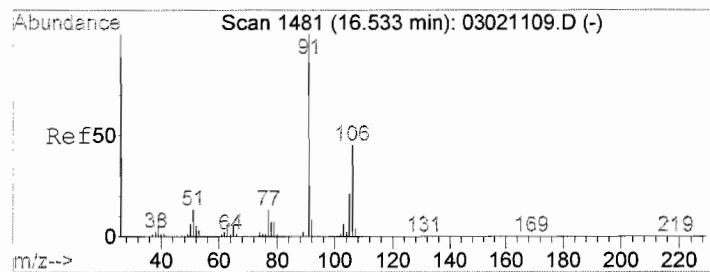


Tgt Ion: 43 Resp: 638  
Ion Ratio Lower Upper  
43 100  
58 0.0 24.9 37.3#

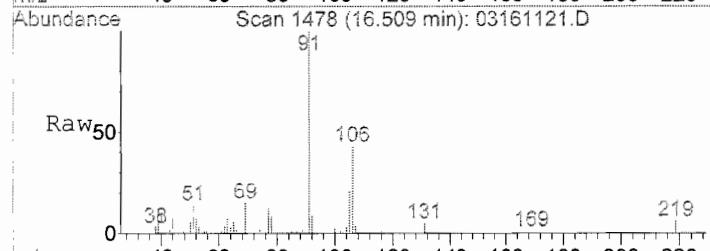




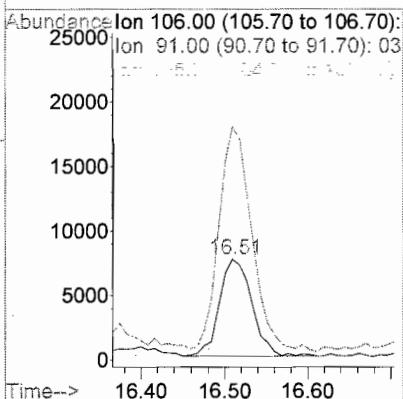
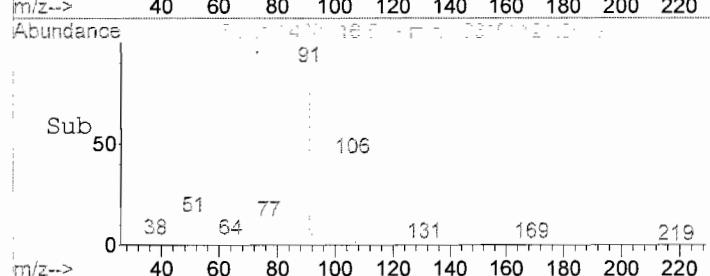




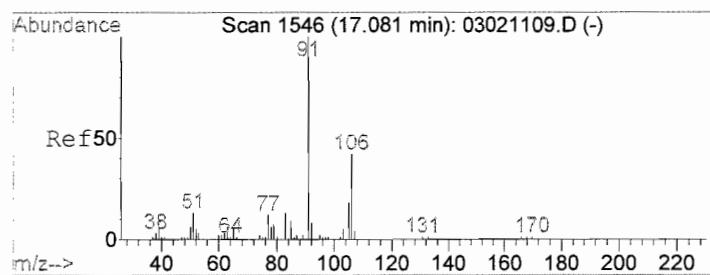
#57  
m,p-Xylenes  
Concen: 0.86 ug/L  
RT: 16.51 min Scan# 1478  
Delta R.T. 0.00 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm



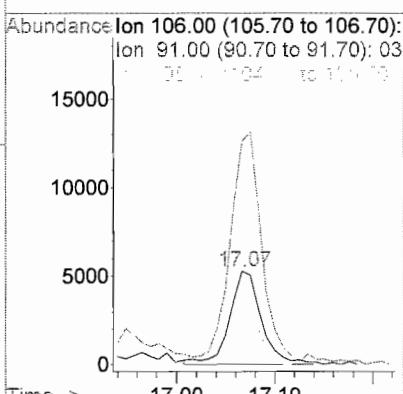
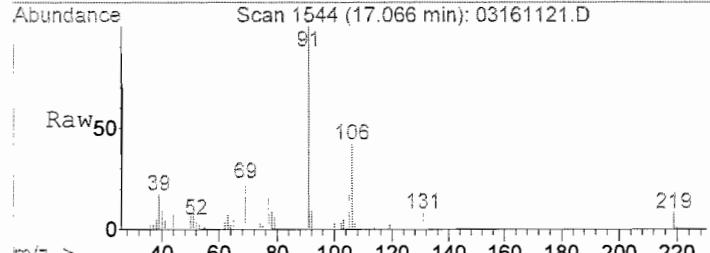
Tgt Ion:106 Resp: 20285  
Ion Ratio Lower Upper  
106 100  
91 234.3 182.2 273.4  
105 48.0 37.7 56.5



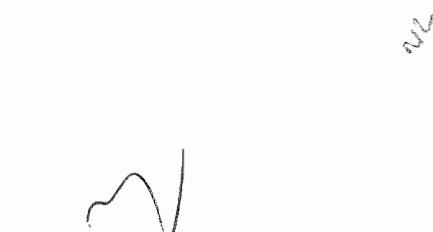
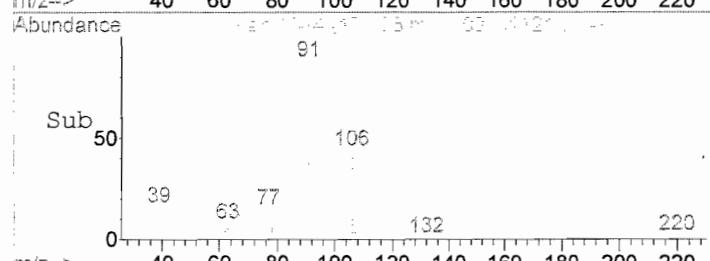
*(possible compound)*

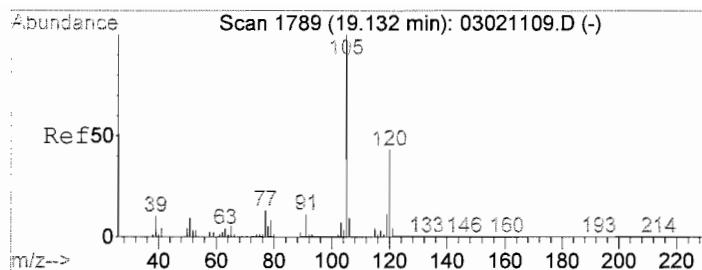


#59  
o-Xylene  
Concen: 0.33 ug/L  
RT: 17.07 min Scan# 1544  
Delta R.T. 0.00 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm

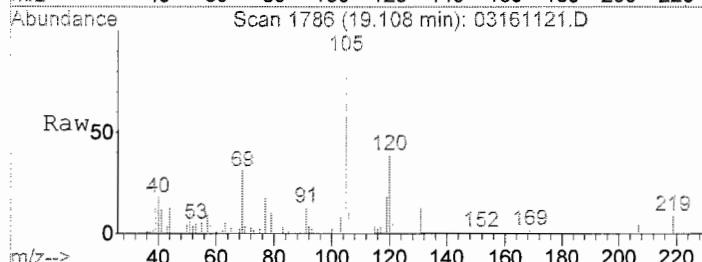


*NR*

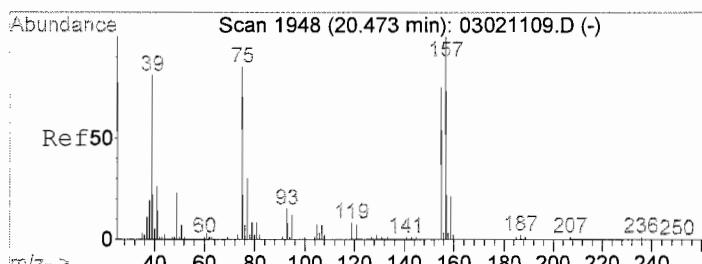
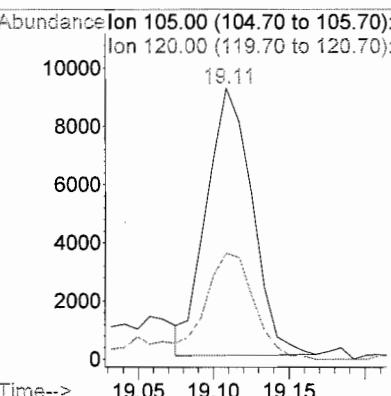
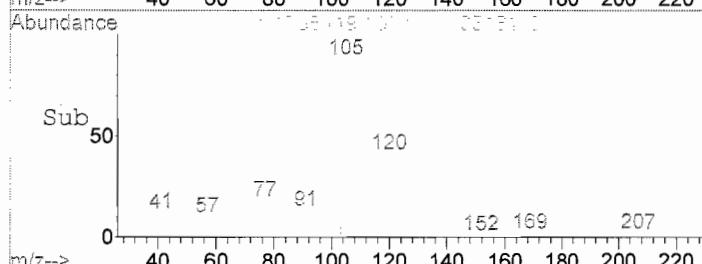




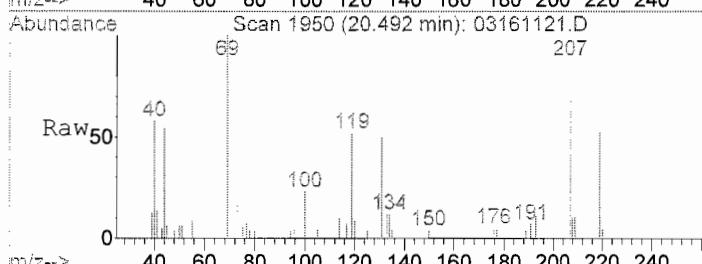
#72  
1,2,4-Trimethylbenzene  
Concen: 0.34 ug/L  
RT: 19.11 min Scan# 1786  
Delta R.T. 0.00 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm



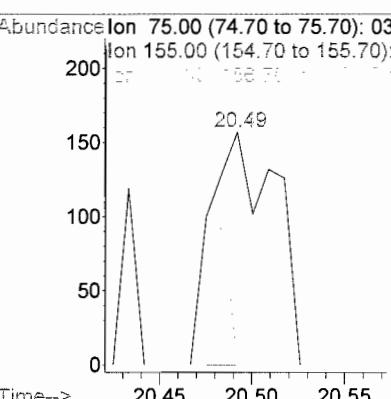
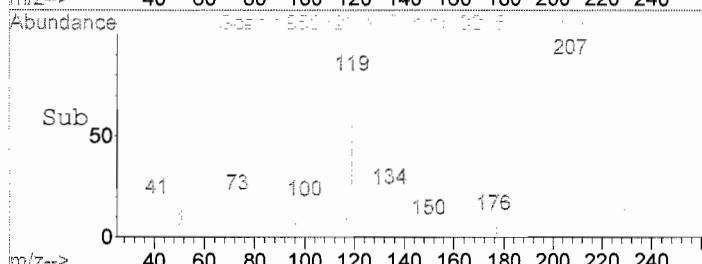
Tgt Ion: 105 Resp: 19272  
Ion Ratio Lower Upper  
105 100  
120 42.0 31.9 47.9

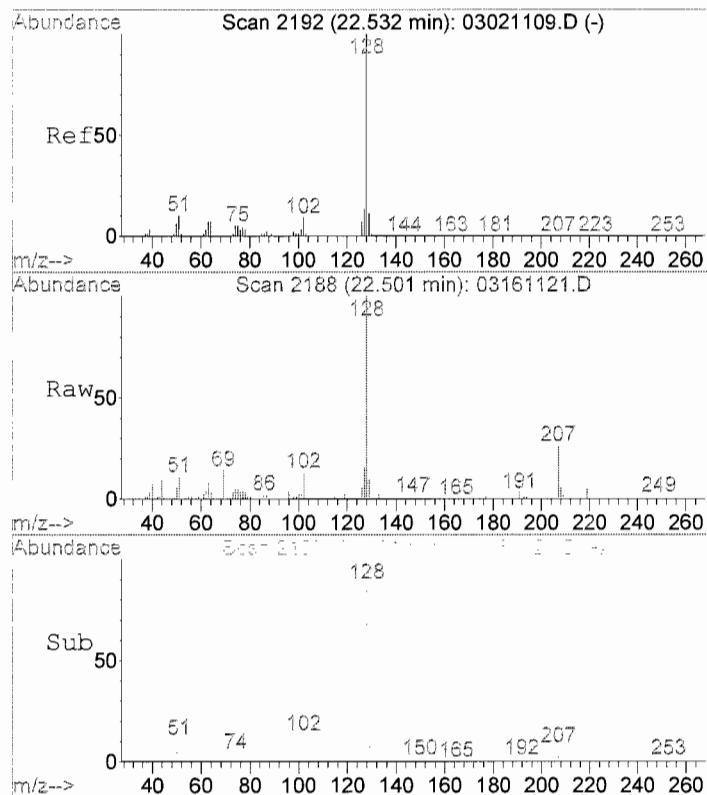


#79  
1,2-Dibromo-3-chloropropane  
Concen: 0.22 ug/L  
RT: 20.49 min Scan# 1950  
Delta R.T. 0.05 min  
Lab File: 03161121.D  
Acq: 16 Mar 2011 7:16 pm



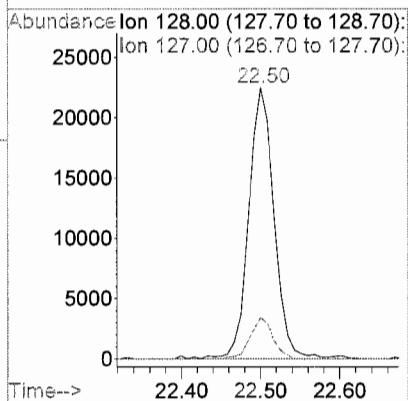
Tgt Ion: 75 Resp: 378  
Ion Ratio Lower Upper  
75 100  
155 0.0 67.3 100.9#  
157 13.5 89.6 134.4#





#81  
 Naphthalene  
 Concen: 1.94 ug/L  
 RT: 22.50 min Scan# 2188  
 Delta R.T. 0.00 min  
 Lab File: 03161121.D  
 Acq: 16 Mar 2011 7:16 pm

Tgt Ion:128 Resp: 49879  
 Ion Ratio Lower Upper  
 128 100  
 127 13.5 10.2 15.4



11C0694

Phoenix

SOP No. PE-VOA-001, Rev. 1  
 Effective Date: 03/11/2010  
 Page No.: 1 of 1

## ANALYTICAL DATA REVIEW CHECKLIST

### SOP PE-VOA-001 R.1 GC/MS Volatile Organic Analysis [ Method No. EPA 624 & 8260B ]

Analysis Date:	03/18/11	Analyst:	LC	
Description		Yes	No	NA <sup>1</sup>
1.	BFB (50 ng or less): Verify meets criteria every 12 hours	/		
2.	Initial Calibration Curve (5 levels)	/		
-	Date of Initial Calibration: 03/11/11	/		
-	SPCCs must meet Min. RF	/		
-	CCCs ≤ 30% RPD	/		
-	All other compounds ≤ 15% RSD or use curve	/		
-	Comments:	/		
-	Second source within historical limits	/		
3.	Continuing Calibration Check (every 12 hours)	/		
-	SPCCs must meet Min. RF	/		
-	CCCs ≤ 20% D	/		
-	IS RT ± 30 secs	/		
-	IS area -50% to +100%	/		
-	All CCVs for reported analytes within historical limits	/		
4.	Method Blank	/		
-	Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/		
-	All compounds of interest must be < Reporting Limit	/		
5.	Laboratory Control Samples (LCS/LCSD)	/		
-	Must be analyzed per 20 samples/per matrix/per batch	/		
-	LCS/LCSD recoveries within historical limits	/		
-	RPD ≤ 25%	/	-	(1)
-	Surrogates within historical limits	/		
6.	MS/MSD	/		
-	Must be analyzed per 20 samples/per matrix/per batch	/		
-	MS/MSD recoveries within historical limits	/	-	(2)
-	RPD ≤ 25%	/	-	(3)
-	Surrogates within historical limits	/		
7.	Samples	/		
-	Analyzed within 14 days of sampling	/		
-	IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL or CCV	/		
-	Surrogate recoveries within historical limits	/		
-	pH ≤ 2	/		
-	If pH is not ≤ 2, flag data with P and pH Data Qualifier	/		
Comments:				
(1) Trichlorofluoromethane 27				
(2) Iodomethane M7				
(3) 1,1-DCE, Methylene chloride 122				

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: <i>LC</i>	Date: 03/21/11
	Reviewer: <i>Amy</i>	Date: 3/21/11

<sup>1</sup>) NA: Not Applicable

**TestAmerica  
Phoenix**

## **GC/MS 7 DAILY LOG SUMMARY**

DATE: 03/18/11  
ANALYST: CC

**QC BATCH # (s) :**

Air

H<sub>2</sub>O

11 C 8693

1100694

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SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\03\811

CALIBRATION METHOD(S): 031711.M

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
8	03181101	Blank	1x10mL	N/A	8260B	H <sub>2</sub> O	DNA-Clean Out
1	02	Tune	2mL				
9	03	25 PPB CCV	1x10mL				
10	04	20 PPB CCV					Acetone ↑
12	05	11C0693 / 11C0694 -BSI					
13	06	1 -BSI					
16	07	1 -BLK1					
1	08	PUC0904-05A (TB)		≤2			PCE
2	09	1 0982-05A 1		≤2			
3	10	1 0827-02A		≤2			Source
4	11	11C0693 -MSI		≤2			
5	12	1 -MSI		≤2			
6	13	PUC1236-01A	20x 0.5mL	N/A		Air	Source D ③ 1220
7	14	DNA -DUP1	1			1	D ③ 1223
8	15	PUC1236-02A	1x 10cc	1		1	③ 1225
9	16	1 -01A	1	N/A		Air	Source ③ 1435
10	17	11C0693 -DUP1	1	1		1	③ 1438
12	18	PUC0827-01A	1x10mL	≤2		H <sub>2</sub> O	
13	19	1 -03A	1	≤2			
16	20	1 -04A	1	≤2			
13	21	0829-01A	1	≤2			
16	22	0730-01B REI	1	≤2			Possible carryover in original
1	23	0904-04A	1	≤2			PCE
2	24	1205-01D	10x 1mL	pH=7			
3	25	1116-01E REI	200x 50mL	pH=7			Acetone ③ 10cc Acetone
4	26	1079-02A (TB)	1x10mL	≤2	(24)		
5	27	1108-15A 1	1	≤2			
8	28	1079-01C	1	≤2			

## **STANDARD ID NUMBERS**

## **REQUIRED REVIEWS**

CCV/H2O LCS/H2O SPIKE: PH01537

## **ARCHON REVIEWED**

CALIBRATION STD: 1505

**By / Date:**

**Internal Std:** | 1522

PC 03/18/11

IS/Surrogate/BFB: 1534 /AUG/1\*

By / Date: LC 03/18/11

LOT #:

8-1211

# Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\031811

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	8	03181101.d	1.	BLANK		18 Mar 2011 07:39
2	1	03181102.d	1.	TUNE		18 Mar 2011 08:07
3	9	03181103.d	1.	25 PPB CCV		18 Mar 2011 08:26
4	10	03181104.d	1.	20 PPB CCV		18 Mar 2011 08:57
5	12	03181105.d	1.	-BS1		18 Mar 2011 09:28
6	13	03181106.d	1.	-BSD1		18 Mar 2011 09:58
7	16	03181107.d	1.	-BLK1		18 Mar 2011 10:29
8	1	03181108.d	1.	PUC0904-05	TB	18 Mar 2011 11:00
9	2	03181109.d	1.	PUC0982-05	TB	18 Mar 2011 11:30
10	3	03181110.d	1.	PUC0827-02	SOURCE	18 Mar 2011 12:01
11	4	03181111.d	1.	-MS1		18 Mar 2011 12:32
12	5	03181112.d	1.	-MSD1		18 Mar 2011 13:03
13	6	03181113.d	1.	PUC1236-01	20X	18 Mar 2011 13:33
14	7	03181114.d	1.	-DUP1	20X	18 Mar 2011 14:04
15	8	03181115.d	1.	PUC1236-02		18 Mar 2011 14:35
16	6	03181116.d	1.	PUC1236-01		18 Mar 2011 15:06
17	7	03181117.d	1.	-DUP1		18 Mar 2011 15:37
18	9	03181118.d	1.	PUC0827-01		18 Mar 2011 16:07
19	10	03181119.d	1.	PUC0827-03		18 Mar 2011 16:38
20	12	03181120.d	1.	PUC0827-04		18 Mar 2011 17:09
21	13	03181121.d	1.	PUC0829-01		18 Mar 2011 17:40
22	16	03181122.d	1.	PUC0730-01RE1		18 Mar 2011 18:11
23	1	03181123.d	1.	PUC0904-04		18 Mar 2011 18:42
24	2	03181124.d	1.	PUC1205-01	10X	18 Mar 2011 19:12
25	3	03181125.d	1.	PUC1116-01RE1	200X	18 Mar 2011 19:43
26	4	03181126.d	1.	PUC1079-02	TB	18 Mar 2011 20:14
27	5	03181127.d	1.	PUC1108-15	TB	18 Mar 2011 20:45
28	8	03181128.d	1.	PUC1079-01		18 Mar 2011 21:15

✓ 3/21/11

ccsp/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181101.D Vial: 8  
 Acq On : 18 Mar 2011 7:39 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/21/11

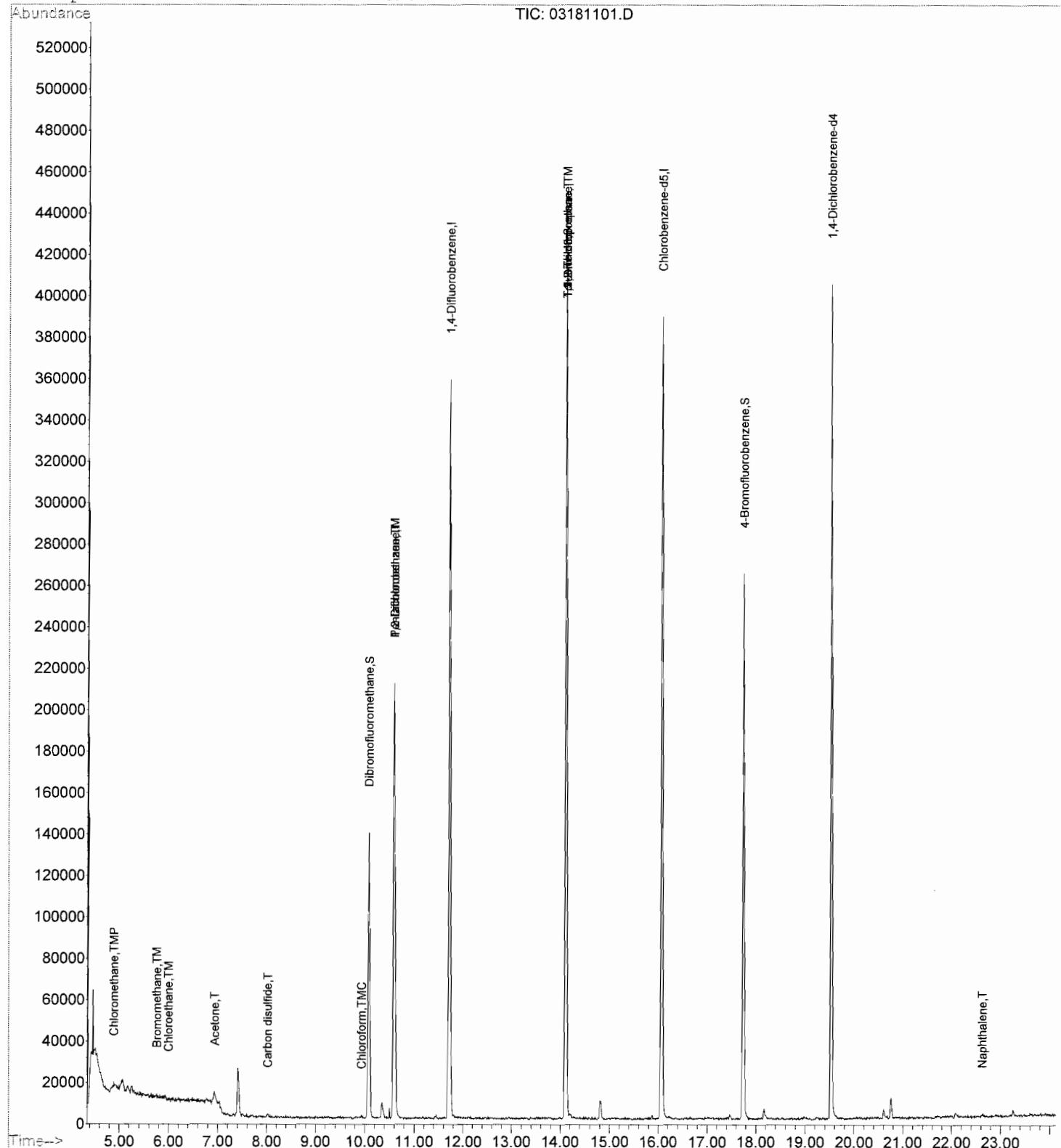
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	177756	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	331366	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	266759	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	116163	25.00	ug/L	0.00
<hr/>						
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	99689	22.29	ug/L	0.00
Spiked Amount 25.000			Recovery	=	89.16%	
39) Toluene-d8	14.11	98	349987	20.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	83.76%	
53) 4-Bromofluorobenzene	17.74	95	122288	20.92	ug/L	0.00
Spiked Amount 25.000			Recovery	=	83.68%	
<i>Q</i>						
Target Compounds						
3) Chloromethane	4.89	50	1365	0.10	ug/L	91
5) Bromomethane	5.76	94	250	0.30	ug/L	# 3
6) Chloroethane	5.99	64	508	0.09	ug/L	89
8) Acetone	6.94	43	10522	7.47	ug/L	97
13) Carbon disulfide	8.03	76	2702	0.15	ug/L	100
21) Chloroform	9.93	83	1240	0.13	ug/L	# 71
24) 1,2-Dichloroethane	10.59	62	1040	0.18	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	325	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.11	76	3746	0.62	ug/L	# 67
74) Naphthalene	22.63	128	1279	0.21	ug/L	100

*Dry* *Clean* *Q*

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181101.D Vial: 8  
 Acq On : 18 Mar 2011 7:39 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011 Quant Results File: 031711.RES

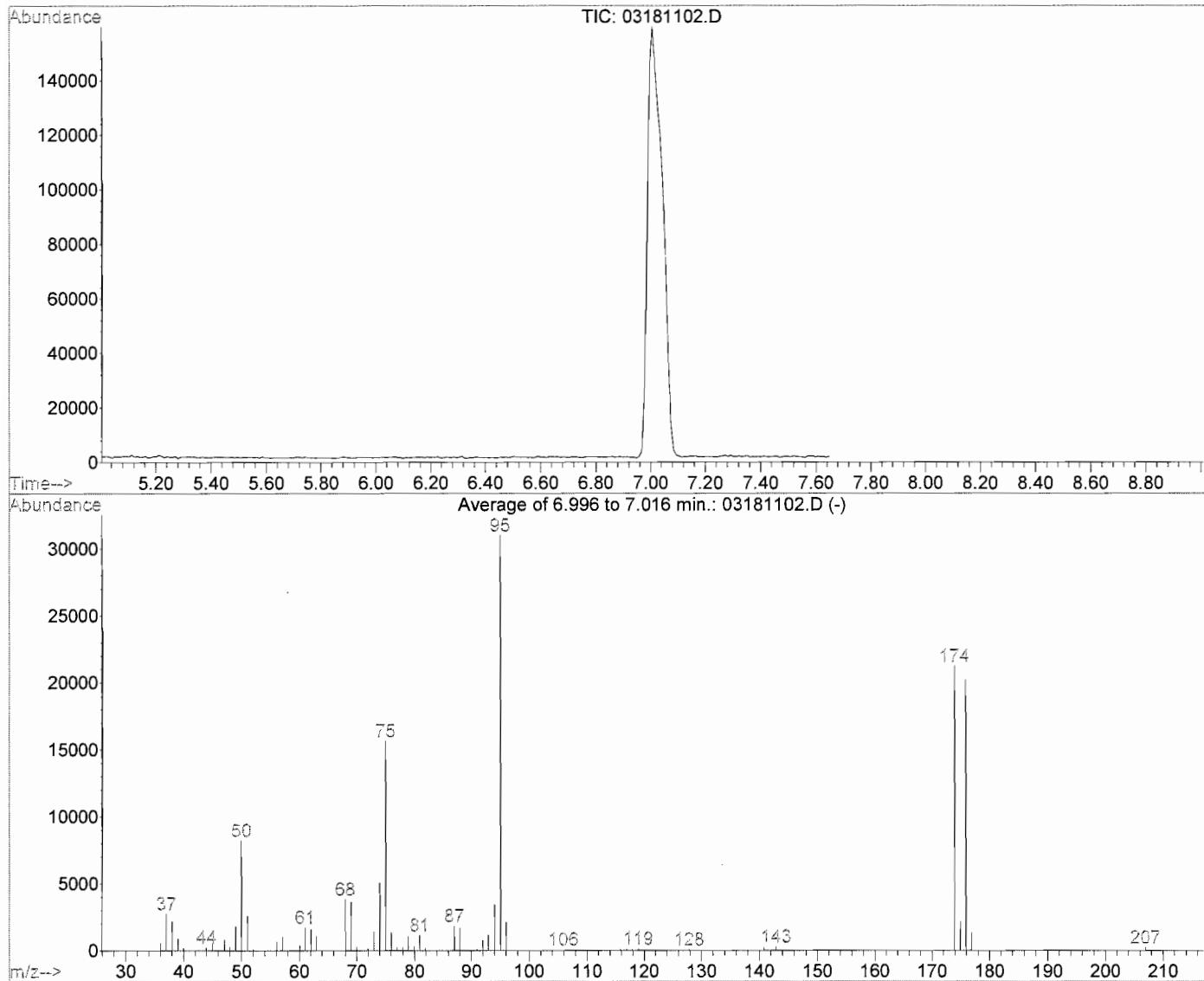
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181102.D Vial: 1  
 Acq On : 18 Mar 2011 8:07 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

13/21/11



Spectrum Information: Average of 6.996 to 7.016 min.

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	26.5	8199	PASS
75	95	30	60	50.5	15631	PASS
95	95	100	100	100.0	30971	PASS
96	95	5	9	6.7	2089	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.5	21208	PASS
175	174	5	9	7.3	1545	PASS
176	174	95	101	95.2	20200	PASS
177	176	5	9	6.4	1295	PASS

13/21/11

## NEW8260-CCV

Data File Name 03181103.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\031811\  
 Operator LC  
 Date Acquired 3/18/2011 8:26  
 Acq. Method File 8260B  
 Sample Name 25 PPB CCV  
 Instrument Name GCMS7

Internal Standard	Target Response	CCV Response	Low	High	T/F
Pentafluorobenzene	163018	164363	82181.5	328726	TRUE
1,4-Difluorobenzene	288350	291205	145602.5	582410	TRUE
Chlorobenzene-d5	234811	242488	121244	484976	TRUE
1,4-Dichlorobenzene-d4	108888	112264	56132	224528	TRUE

Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	23.27	25.00	93.09	60	150	TRUE
Chloromethane	25.59	25.00	102.37	60	140	TRUE
Vinyl chloride	24.62	25.00	98.47	80	120	TRUE CCC
Bromomethane	21.53	25.00	86.12	70	140	TRUE
Chloroethane	24.47	25.00	97.87	70	130	TRUE
Trichlorofluoromethane	23.49	25.00	93.95	70	150	TRUE
Acetone	27.89	25.00	111.56	10	150	TRUE
Iodomethane	24.06	25.00	96.23	70	140	TRUE
1,1-Dichloroethene	22.74	25.00	90.96	80	120	TRUE CCC
Methylene chloride	22.89	25.00	91.58	70	120	TRUE
Freon 113	23.01	25.00	92.02	60	140	TRUE
Carbon disulfide	23.23	25.00	92.91	70	130	TRUE
trans-1,2-Dichloroethene	23.40	25.00	93.60	80	120	TRUE
MTBE	23.54	25.00	94.17	70	130	TRUE
1,1-Dichloroethane	23.24	25.00	92.94	70	125	TRUE
Vinyl acetate	23.06	25.00	92.24	40	150	TRUE
2-Butanone (MEK)	26.67	25.00	106.68	40	150	TRUE
cis-1,2-Dichloroethene	23.15	25.00	92.60	80	120	TRUE
Bromochloromethane	23.31	25.00	93.22	80	120	TRUE
Chloroform	23.43	25.00	93.71	80	120	TRUE CCC
2,2-Dichloropropane	24.95	25.00	99.80	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>23.51</b>	<b>25.00</b>	<b>94.06</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	23.56	25.00	94.24	75	130	TRUE
1,1,1-Trichloroethane	24.05	25.00	96.21	80	120	TRUE
1,1-Dichloropropene	24.08	25.00	96.30	80	120	TRUE
Carbon tetrachloride	24.15	25.00	96.59	80	130	TRUE
Benzene	23.45	25.00	93.80	80	120	TRUE
Dibromomethane	23.37	25.00	93.48	80	120	TRUE
1,2-Dichloropropane	23.69	25.00	94.75	80	120	TRUE CCC
Trichloroethene	23.97	25.00	95.86	80	120	TRUE
Bromodichloromethane	24.56	25.00	98.25	80	120	TRUE
2-Chlorovinylethylether	26.44	25.00	105.77	70	135	TRUE
cis-1,3-Dichloropropene	24.45	25.00	97.78	80	120	TRUE
4-Methyl-2-pentanone (MIB)	23.65	25.00	94.58	60	130	TRUE
trans-1,3-Dichloropropene	24.28	25.00	97.13	80	125	TRUE

1,1,2-Trichloroethane	23.01	25.00	92.02	80	120	TRUE
Toluene-d8	<b>22.71</b>	<b>25.00</b>	<b>90.83</b>	<b>80</b>	<b>120</b>	TRUE
Toluene	23.59	25.00	94.37	80	120	TRUE CCC
1,3-Dichloropropane	23.40	25.00	93.58	80	120	TRUE
2-Hexanone	25.28	25.00	101.12	20	150	TRUE
Dibromochloromethane	23.65	25.00	94.61	80	120	TRUE
1,2-Dibromoethane	23.54	25.00	94.17	80	120	TRUE
Tetrachloroethene	24.21	25.00	96.84	70	130	TRUE
1,1,1,2-Tetrachloroethane	23.74	25.00	94.96	80	120	TRUE
Chlorobenzene	23.51	25.00	94.05	80	120	TRUE
Ethylbenzene	23.74	25.00	94.97	80	120	TRUE CCC
m,p-Xylenes	23.67	25.00	94.67	60	140	TRUE
Styrene	24.79	25.00	99.16	80	120	TRUE
o-Xylene	23.49	25.00	93.96	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>23.09</b>	<b>25.00</b>	<b>92.37</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	23.96	25.00	95.83	80	120	TRUE
1,1,2,2-Tetrachloroethane	23.44	25.00	93.74	80	120	TRUE
1,2,3-Trichloropropane	24.60	25.00	98.39	70	130	TRUE
Isopropylbenzene	24.64	25.00	98.54	80	130	TRUE
Bromobenzene	24.09	25.00	96.35	80	120	TRUE
n-Propylbenzene	24.06	25.00	96.26	75	130	TRUE
2-Chlorotoluene	23.68	25.00	94.70	80	120	TRUE
4-Chlorotoluene	24.02	25.00	96.08	80	120	TRUE
1,3,5-Trimethylbenzene	24.69	25.00	98.77	80	130	TRUE
tert-Butylbenzene	24.15	25.00	96.59	80	120	TRUE
1,2,4-Trimethylbenzene	23.94	25.00	95.77	80	120	TRUE
sec-Butylbenzene	23.83	25.00	95.32	80	125	TRUE
1,3-Dichlorobenzene	23.84	25.00	95.34	80	120	TRUE
1,4-Dichlorobenzene	23.69	25.00	94.76	80	120	TRUE
p-Isopropyltoluene	24.45	25.00	97.79	80	130	TRUE
1,2-Dichlorobenzene	23.16	25.00	92.64	80	120	TRUE
n-Butylbenzene	24.37	25.00	97.48	80	130	TRUE
1,2-Dibromo-3-chloropropane	23.47	25.00	93.88	50	150	TRUE
1,2,4-Trichlorobenzene	24.30	25.00	97.20	50	150	TRUE
Naphthalene	22.67	25.00	90.68	40	150	TRUE
Hexachlorobutadiene	25.09	25.00	100.34	40	150	TRUE
1,2,3-Trichlorobenzene	24.49	25.00	97.97	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163018	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	288350	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	234811	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	108888	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	96456	23.51	ug/L	0.00
Spiked Amount	25.000		Recovery	=	94.04%	
39) Toluene-d8	14.11	98	330236	22.71	ug/L	0.00
Spiked Amount	25.000		Recovery	=	90.84%	
53) 4-Bromofluorobenzene	17.74	95	118842	23.09	ug/L	0.00
Spiked Amount	25.000		Recovery	=	92.36%	

## Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.60	85	179237	23.27	ug/L
3) Chloromethane	4.90	50	325877	25.59	ug/L
4) Vinyl chloride	5.18	62	279081	24.62	ug/L
5) Bromomethane	5.77	94	126891	21.53	ug/L
6) Chloroethane	5.98	64	147050	24.47	ug/L
7) Trichlorofluoromethane	6.78	101	185141	23.49	ug/L
8) Acetone	6.92	43	26901	27.89	ug/L
9) Iodomethane	7.57	142	87668	24.06	ug/L
10) 1,1-Dichloroethene	7.51	96	104551	22.74	ug/L
11) Methylene chloride	7.71	84	123842	22.89	ug/L
12) Freon 113	7.77	101	125234	23.01	ug/L
13) Carbon disulfide	8.02	76	379972	23.23	ug/L
14) trans-1,2-Dichloroethene	8.60	96	119037	23.40	ug/L
15) MTBE	8.73	73	204673	23.54	ug/L
16) 1,1-Dichloroethane	8.92	63	246596	23.24	ug/L
17) Vinyl acetate	9.08	43	190087	23.06	ug/L
18) 2-Butanone (MEK)	9.47	72	6808	26.67	ug/L
19) cis-1,2-Dichloroethene	9.66	96	121956	23.15	ug/L
20) Bromochloromethane	9.87	128	44931	23.31	ug/L
21) Chloroform	9.92	83	205152	23.43	ug/L
22) 2,2-Dichloropropane	10.03	77	177134	24.95	ug/L
24) 1,2-Dichloroethane	10.77	62	125911	23.56	ug/L
25) 1,1,1-Trichloroethane	10.90	97	151238	24.05	ug/L
27) 1,1-Dichloropropene	11.15	75	177713	24.08	ug/L
28) Carbon tetrachloride	11.38	117	123065	24.15	ug/L
29) Benzene	11.43	78	462743	23.45	ug/L
30) Dibromomethane	12.16	93	54563	23.37	ug/L
31) 1,2-Dichloropropane	12.20	63	130555	23.69	ug/L
32) Trichloroethene	12.26	95	118263	23.97	ug/L
33) Bromodichloromethane	12.32	83	142290	24.56	ug/L
34) 2-Chlorovinylethylether	12.85	63	26853	26.44	ug/L
35) cis-1,3-Dichloropropene	13.16	75	171902	24.45	ug/L
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	68113	23.65	ug/L
37) trans-1,3-Dichloropropene	13.72	75	131779	24.28	ug/L
38) 1,1,2-Trichloroethane	13.94	83	60029	23.01	ug/L
40) Toluene	14.20	92	264705	23.59	ug/L
42) 1,3-Dichloropropane	14.26	76	124306	23.40	ug/L

(#) = qualifier out of range (m) = manual integration

03181103.D 031711.M Fri Mar 18 12:03:56 2011

✓ 03/21/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

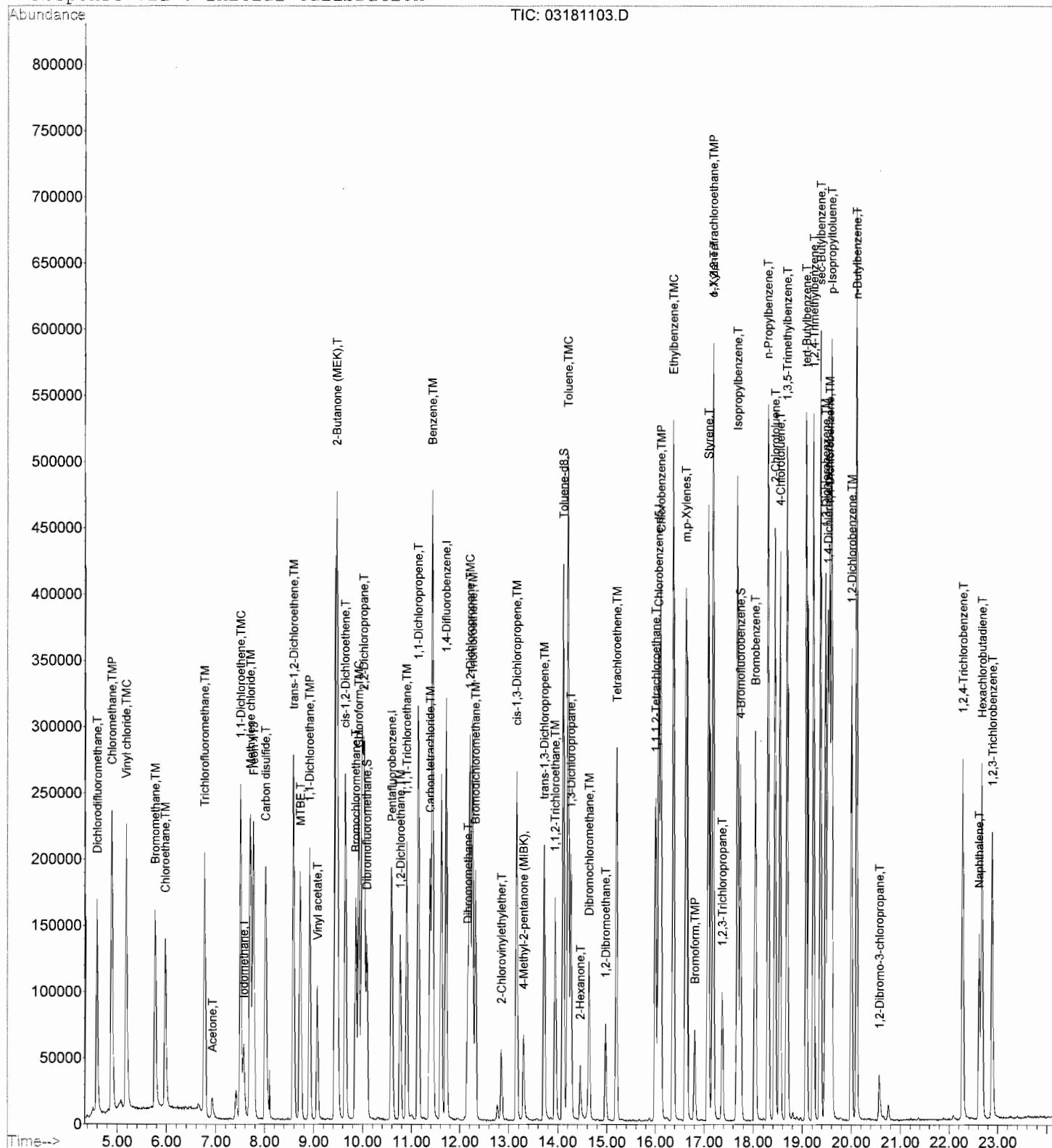
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	44787	25.28	ug/L	# 95
44) Dibromochloromethane	14.64	129	75574	23.65	ug/L	99
45) 1,2-Dibromoethane	14.97	107	62801	23.54	ug/L	96
46) Tetrachloroethene	15.20	166	101959	24.21	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.00	131	82557	23.74	ug/L	97
48) Chlorobenzene	16.11	112	259478	23.51	ug/L	99
49) Ethylbenzene	16.38	91	493621	23.74	ug/L	100
50) m,p-Xylenes	16.63	106	172346	23.67	ug/L	98
51) Styrene	17.09	104	273768	24.79	ug/L	98
52) o-Xylene	17.19	106	166268	23.49	ug/L	96
55) Bromoform	16.81	173	37773	23.96	ug/L	94
56) 1,1,2,2-Tetrachloroethane	17.18	83	74718	23.44	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	17062	24.60	ug/L	97
58) Isopropylbenzene	17.69	105	410764	24.64	ug/L	100
59) Bromobenzene	18.04	156	92660	24.09	ug/L	98
60) n-Propylbenzene	18.29	91	572801	24.06	ug/L	100
61) 2-Chlorotoluene	18.44	91	330154	23.68	ug/L	99
62) 4-Chlorotoluene	18.55	91	332051	24.02	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	355783	24.69	ug/L	99
64) tert-Butylbenzene	19.09	119	296214	24.15	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	346750	23.94	ug/L	99
66) sec-Butylbenzene	19.37	105	501006	23.83	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	186834	23.84	ug/L	98
68) 1,4-Dichlorobenzene	19.56	146	186953	23.69	ug/L	99
69) p-Isopropyltoluene	19.60	119	392872	24.45	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	157901	23.16	ug/L	98
71) n-Butylbenzene	20.11	91	435904	24.37	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	9972	23.47	ug/L	89
73) 1,2,4-Trichlorobenzene	22.28	180	107001	24.30	ug/L	99
74) Naphthalene	22.62	128	132378	22.67	ug/L	100
75) Hexachlorobutadiene	22.68	225	70543	25.09	ug/L	97
76) 1,2,3-Trichlorobenzene	22.89	180	87921	24.49	ug/L	98

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

✓ 3/21/11

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2 T	Dichlorodifluoromethane	1.181	1.099	6.9	90	0.00
3 TMP	Chloromethane	1.953	1.999	-2.4	101	0.00
4 TMC	Vinyl chloride	1.739	1.712	1.6	98	0.00
5 TM	Bromomethane	0.813	0.778	4.3	90	0.00
6 TM	Chloroethane	0.922	0.902	2.2	98	0.00
7 TM	Trichlorofluoromethane	1.209	1.136	6.0	86	0.00
8 T	Acetone	0.194	0.165	14.9	104	-0.02
9 T	Iodomethane	0.531	0.538	-1.3	89	0.00
10 TMC	1,1-Dichloroethene	0.705	0.641	9.1	94	0.00
11 TM	Methylene chloride	0.830	0.760	8.4	94	0.00
12	Freon 113	0.835	0.768	8.0	94	0.00
13 T	Carbon disulfide	2.509	2.331	7.1	95	0.00
14 TM	trans-1,2-Dichloroethene	0.780	0.730	6.4	94	0.00
15 T	MTBE	1.333	1.256	5.8	95	0.00
16 TMP	1,1-Dichloroethane	1.628	1.513	7.1	93	0.00
17 T	Vinyl acetate	1.264	1.166	7.8	94	0.00
18 T	2-Butanone (MEK)	0.036	0.042#	-16.7	99	0.00
19 T	cis-1,2-Dichloroethene	0.808	0.748	7.4	93	0.00
20 T	Bromochloromethane	0.296	0.276	6.8	95	0.00
21 TMC	Chloroform	1.343	1.258	6.3	94	0.00
22 T	2,2-Dichloropropane	1.089	1.087	0.2	98	0.00
23 S	Dibromofluoromethane	0.629	0.592	5.9	93	0.00
24 TM	1,2-Dichloroethane	0.820	0.772	5.9	92	0.00
25 TM	1,1,1-Trichloroethane	0.964	0.928	3.7	93	0.00
26 I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
27 T	1,1-Dichloropropene	0.640	0.616	3.8	93	0.00
28 TM	Carbon tetrachloride	0.442	0.427	3.4	92	0.00
29 TM	Benzene	1.711	1.605	6.2	94	0.00
30 T	Dibromomethane	0.202	0.189	6.4	94	0.00
31 TMC	1,2-Dichloropropane	0.478	0.453	5.2	93	0.00
32 TM	Trichloroethene	0.428	0.410	4.2	95	0.00
33 TM	Bromodichloromethane	0.502	0.493	1.8	94	0.00
34 T	2-Chlorovinylethylether	0.101	0.093#	7.9	93	0.00
35 TM	cis-1,3-Dichloropropene	0.610	0.596	2.3	94	0.00
36	4-Methyl-2-pentanone (MIBK)	0.250	0.236	5.6	95	0.00
37 TM	trans-1,3-Dichloropropene	0.471	0.457	3.0	93	0.00
38 TM	1,1,2-Trichloroethane	0.226	0.208	8.0	90	0.00
39 S	Toluene-d8	1.261	1.145	9.2	92	0.00
40 TMC	Toluene	0.973	0.918	5.7	94	0.00
41 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
42 T	1,3-Dichloropropane	0.566	0.529	6.5	89	0.00
43 T	2-Hexanone	0.189	0.191	-1.1	101	0.00
44 TM	Dibromochloromethane	0.340	0.322	5.3	92	0.00
45 T	1,2-Dibromoethane	0.284	0.267	6.0	89	0.00
46 TM	Tetrachloroethene	0.448	0.434	3.1	93	0.00
47 T	1,1,1,2-Tetrachloroethane	0.370	0.352	4.9	94	0.00
48 TMP	Chlorobenzene	1.175	1.105	6.0	91	0.00

(#) = Out of Range

03181103.D 031711.M Fri Mar 18 12:04:01 2011

Page 1

✓ 3/21/11

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 TMC	Ethylbenzene	2.214	2.102	5.1	92	0.00
50 T	m,p-Xylenes	0.775	0.734	5.3	92	0.00
51 T	Styrene	1.176	1.166	0.9	93	0.00
52 T	o-Xylene	0.754	0.708	6.1	93	0.00
53 S	4-Bromofluorobenzene	0.548	0.506	7.7	92	0.00
54	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
55 TMP	Bromoform	0.362	0.347	4.1	89	0.00
56 TMP	1,1,2,2-Tetrachloroethane	0.732	0.686	6.3	91	0.00
57 T	1,2,3-Trichloropropane	0.159	0.157	1.3	91	0.00
58 T	Isopropylbenzene	3.828	3.772	1.5	92	0.00
59 T	Bromobenzene	0.883	0.851	3.6	88	0.00
60 T	n-Propylbenzene	5.465	5.260	3.8	91	0.00
61 T	2-Chlorotoluene	3.202	3.032	5.3	91	0.00
62 T	4-Chlorotoluene	3.174	3.049	3.9	90	0.00
63 T	1,3,5-Trimethylbenzene	3.308	3.267	1.2	93	0.00
64 T	tert-Butylbenzene	2.816	2.720	3.4	91	0.00
65 T	1,2,4-Trimethylbenzene	3.325	3.184	4.2	91	0.00
66 T	sec-Butylbenzene	4.827	4.601	4.7	90	0.00
67 TM	1,3-Dichlorobenzene	1.800	1.716	4.7	91	0.00
68 TM	1,4-Dichlorobenzene	1.812	1.717	5.2	93	0.00
69 T	p-Isopropyltoluene	3.690	3.608	2.2	91	0.00
70 TM	1,2-Dichlorobenzene	1.565	1.450	7.3	88	0.00
71 T	n-Butylbenzene	4.107	4.003	2.5	89	0.00
72 T	1,2-Dibromo-3-chloropropane	0.098	0.092#	6.1	88	0.00
73 T	1,2,4-Trichlorobenzene	1.011	0.983	2.8	87	0.00
74 T	Naphthalene	1.341	1.216	9.3	81	0.00
75 T	Hexachlorobutadiene	0.646	0.648	-0.3	92	0.00
76 T	1,2,3-Trichlorobenzene	0.824	0.807	2.1	87	0.00

## 624-CCV

Data File Name 03181104.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\031811\  
 Operator LC  
 Date Acquired 3/18/2011 8:57  
 Acq. Method File 8260B  
 Sample Name 20 PPB CCV  
 Instrument Name GCMS7

✓ 3/21/11

Internal Standard	Target Response	CCV Response	Low	High	T/F	
Pentafluorobenzene	157055	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	276535	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	227866	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	106277	112264	56132	224528	TRUE	
Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	19.24	20.00	96.20	60	150	TRUE
Chloromethane	19.55	20.00	97.76	0	204	TRUE
Vinyl chloride	19.88	20.00	99.42	4	196	TRUE
Bromomethane	17.87	20.00	89.35	14	186	TRUE
Chloroethane	19.27	20.00	96.34	38	162	TRUE
Trichlorofluoromethane	16.71	20.00	83.55	48	152	TRUE
Acetone	31.46	20.00	157.28	10	150	FALSE
Iodomethane	20.70	20.00	103.51	70	140	TRUE
1,1-Dichloroethene	18.53	20.00	92.66	50	150	TRUE
Methylene chloride	18.11	20.00	90.53	60	140	TRUE
Freon 113	18.69	20.00	93.47	60	140	TRUE
Carbon disulfide	18.72	20.00	93.60	70	130	TRUE
trans-1,2-Dichloroethene	19.23	20.00	96.13	70	130	TRUE
MTBE	17.58	20.00	87.91	70	130	TRUE
1,1-Dichloroethane	18.58	20.00	92.92	72	128	TRUE
Vinyl acetate	17.54	20.00	87.72	40	150	TRUE
2-Butanone (MEK)	24.56	20.00	122.78	40	150	TRUE
cis-1,2-Dichloroethene	18.28	20.00	91.41	80	120	TRUE
Bromochloromethane	18.77	20.00	93.86	80	120	TRUE
Chloroform	18.75	20.00	93.75	68	132	TRUE
2,2-Dichloropropane	20.01	20.00	100.05	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>19.00</b>	<b>20.00</b>	<b>95.02</b>	<b>80</b>	<b>135</b>	<b>TRUE</b>
1,2-Dichloroethane	18.24	20.00	91.19	68	132	TRUE
1,1,1-Trichloroethane	19.74	20.00	98.70	75	125	TRUE
1,1-Dichloropropene	19.34	20.00	96.70	80	120	TRUE
Carbon tetrachloride	20.11	20.00	100.56	73	127	TRUE
Benzene	19.23	20.00	96.17	64	136	TRUE
Dibromomethane	19.15	20.00	95.74	80	120	TRUE
1,2-Dichloropropane	18.68	20.00	93.40	34	166	TRUE
Trichloroethene	19.02	20.00	95.09	66	134	TRUE
Bromodichloromethane	19.00	20.00	95.00	66	134	TRUE
2-Chlorovinylethylether	20.20	20.00	101.02	0	224	TRUE
cis-1,3-Dichloropropene	19.46	20.00	97.28	24	176	TRUE
4-Methyl-2-pentanone (MIB)	18.21	20.00	91.06	60	130	TRUE
trans-1,3-Dichloropropene	18.75	20.00	93.77	50	150	TRUE

CC 03/21/11

1,1,2-Trichloroethane	18.28	20.00	91.42	71	129	TRUE
<b>Toluene-d8</b>	<b>19.04</b>	<b>20.00</b>	<b>95.18</b>	<b>80</b>	<b>125</b>	<b>TRUE</b>
Toluene	19.45	20.00	97.26	74	126	TRUE
1,3-Dichloropropane	18.89	20.00	94.47	80	120	TRUE
2-Hexanone	23.20	20.00	116.02	20	150	TRUE
Dibromochloromethane	18.58	20.00	92.89	68	132	TRUE
1,2-Dibromoethane	18.58	20.00	92.91	80	120	TRUE
Tetrachloroethene	19.74	20.00	98.71	74	126	TRUE
1,1,1,2-Tetrachloroethane	19.01	20.00	95.06	80	120	TRUE
Chlorobenzene	19.15	20.00	95.73	66	134	TRUE
Ethylbenzene	19.61	20.00	98.03	59	141	TRUE
m,p-Xylenes	19.79	20.00	98.97	60	140	TRUE
Styrene	19.87	20.00	99.37	80	120	TRUE
o-Xylene	18.98	20.00	94.92	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>18.78</b>	<b>20.00</b>	<b>93.91</b>	<b>75</b>	<b>125</b>	<b>TRUE</b>
Bromoform	19.52	20.00	97.60	71	129	TRUE
1,1,2,2-Tetrachloroethane	18.77	20.00	93.85	60	140	TRUE
1,2,3-Trichloropropane	18.30	20.00	91.51	70	130	TRUE
Isopropylbenzene	20.08	20.00	100.39	80	130	TRUE
Bromobenzene	19.74	20.00	98.72	80	120	TRUE
n-Propylbenzene	20.08	20.00	100.42	75	130	TRUE
2-Chlorotoluene	19.48	20.00	97.38	80	120	TRUE
4-Chlorotoluene	19.56	20.00	97.79	80	120	TRUE
1,3,5-Trimethylbenzene	19.72	20.00	98.62	80	130	TRUE
tert-Butylbenzene	20.07	20.00	100.35	80	120	TRUE
1,2,4-Trimethylbenzene	19.61	20.00	98.03	80	120	TRUE
sec-Butylbenzene	19.96	20.00	99.82	80	120	TRUE
1,3-Dichlorobenzene	19.48	20.00	97.41	73	127	TRUE
1,4-Dichlorobenzene	19.18	20.00	95.90	63	137	TRUE
p-Isopropyltoluene	20.08	20.00	100.39	80	130	TRUE
1,2-Dichlorobenzene	18.87	20.00	94.34	63	137	TRUE
n-Butylbenzene	20.41	20.00	102.05	80	130	TRUE
1,2-Dibromo-3-chloropropane	19.38	20.00	96.91	50	150	TRUE
1,2,4-Trichlorobenzene	20.55	20.00	102.74	50	150	TRUE
Naphthalene	19.39	20.00	96.94	40	150	TRUE
Hexachlorobutadiene	20.57	20.00	102.84	40	150	TRUE
1,2,3-Trichlorobenzene	19.64	20.00	98.19	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D Vial: 10  
 Acq On : 18 Mar 2011 8:57 am Operator: LC  
 Sample : 20 PPB CCV Inst : GCMS7  
 Misc :

MS Integration Params: RTEINT2.P

Quant Time: Mar 18 12:04 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

✓ 3/21/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	157055	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	276535	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	227866	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	106277	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	75103	19.00	ug/L	0.00
Spiked Amount	25.000		Recovery	=	76.00%	
39) Toluene-d8	14.11	98	265500	19.04	ug/L	0.00
Spiked Amount	25.000		Recovery	=	76.16%	
53) 4-Bromofluorobenzene	17.74	95	93796	18.78	ug/L	0.00
Spiked Amount	25.000		Recovery	=	75.12%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	142752	19.24	ug/L	98
3) Chloromethane	4.89	50	239859	19.55	ug/L	100
4) Vinyl chloride	5.18	62	217174	19.88	ug/L	100
5) Bromomethane	5.77	94	101214	17.87	ug/L	100
6) Chloroethane	5.98	64	111571	19.27	ug/L	98
7) Trichlorofluoromethane	6.78	101	126902	16.71	ug/L	98
8) Acetone	6.93	43	28819	31.46	ug/L	99
9) Iodomethane	7.57	142	72614	20.70	ug/L	95
10) 1,1-Dichloroethene	7.50	96	82093	18.53	ug/L	97
11) Methylene chloride	7.71	84	94356	18.11	ug/L	99
12) Freon 113	7.78	101	98039	18.69	ug/L	98
13) Carbon disulfide	8.02	76	295029	18.72	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	94225	19.23	ug/L	96
15) MTBE	8.73	73	147259	17.58	ug/L	100
16) 1,1-Dichloroethane	8.92	63	190004	18.58	ug/L	100
17) Vinyl acetate	9.08	43	139327	17.54	ug/L	100
18) 2-Butanone (MEK)	9.46	72	6021	24.56	ug/L	44
19) cis-1,2-Dichloroethene	9.66	96	92791	18.28	ug/L	98
20) Bromochloromethane	9.87	128	34867	18.77	ug/L	99
21) Chloroform	9.93	83	158181	18.75	ug/L	99
22) 2,2-Dichloropropane	10.03	77	136873	20.01	ug/L	98
24) 1,2-Dichloroethane	10.77	62	93902	18.24	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	119584	19.74	ug/L	98
27) 1,1-Dichloropropene	11.14	75	136911	19.34	ug/L	98
28) Carbon tetrachloride	11.38	117	98296	20.11	ug/L	100
29) Benzene	11.43	78	363998	19.23	ug/L	99
30) Dibromomethane	12.17	93	42873	19.15	ug/L	96
31) 1,2-Dichloropropane	12.21	63	98741	18.68	ug/L	99
32) Trichloroethene	12.26	95	90004	19.02	ug/L	98
33) Bromodichloromethane	12.32	83	105561	19.00	ug/L	96
34) 2-Chlorovinylethylether	12.85	63	20004	20.20	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	131213	19.46	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	50309	18.21	ug/L	97
37) trans-1,3-Dichloropropene	13.73	75	97604	18.75	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	45752	18.28	ug/L	98
40) Toluene	14.20	92	209288	19.45	ug/L	98
42) 1,3-Dichloropropane	14.26	76	97422	18.89	ug/L	100

(#= qualifier out of range (m)= manual integration

03181104.D 031711.M Fri Mar 18 12:04:43 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D Vial: 10  
 Acq On : 18 Mar 2011 8:57 am Operator: LC  
 Sample : 20 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:04 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	39890	23.20	ug/L	# 94
44) Dibromochloromethane	14.64	129	57602	18.58	ug/L	98
45) 1,2-Dibromoethane	14.97	107	48100	18.58	ug/L	# 95
46) Tetrachloroethene	15.20	166	80678	19.74	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	64157	19.01	ug/L	98
48) Chlorobenzene	16.11	112	205029	19.15	ug/L	98
49) Ethylbenzene	16.37	91	395546	19.61	ug/L	99
50) m,p-Xylenes	16.64	106	139874	19.79	ug/L	98
51) Styrene	17.08	104	212992	19.87	ug/L	99
52) o-Xylene	17.19	106	130400	18.98	ug/L	99
55) Bromoform	16.81	173	30036	19.52	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	58407	18.77	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	12391	18.30	ug/L	95
58) Isopropylbenzene	17.68	105	326744	20.08	ug/L	100
59) Bromobenzene	18.05	156	74132	19.74	ug/L	98
60) n-Propylbenzene	18.30	91	466596	20.08	ug/L	100
61) 2-Chlorotoluene	18.44	91	265078	19.48	ug/L	99
62) 4-Chlorotoluene	18.55	91	263901	19.56	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	277370	19.72	ug/L	98
64) tert-Butylbenzene	19.09	119	240291	20.07	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	277139	19.61	ug/L	99
66) sec-Butylbenzene	19.37	105	409665	19.96	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	149039	19.48	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	147736	19.18	ug/L	100
69) p-Isopropyltoluene	19.60	119	314903	20.08	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	125550	18.87	ug/L	99
71) n-Butylbenzene	20.11	91	356319	20.41	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	8037	19.38	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	88303	20.55	ug/L	97
74) Naphthalene	22.62	128	110494	19.39	ug/L	100
75) Hexachlorobutadiene	22.68	225	56455	20.57	ug/L	99
76) 1,2,3-Trichlorobenzene	22.89	180	68806	19.64	ug/L	100

(#) = qualifier out of range (m) = manual integration

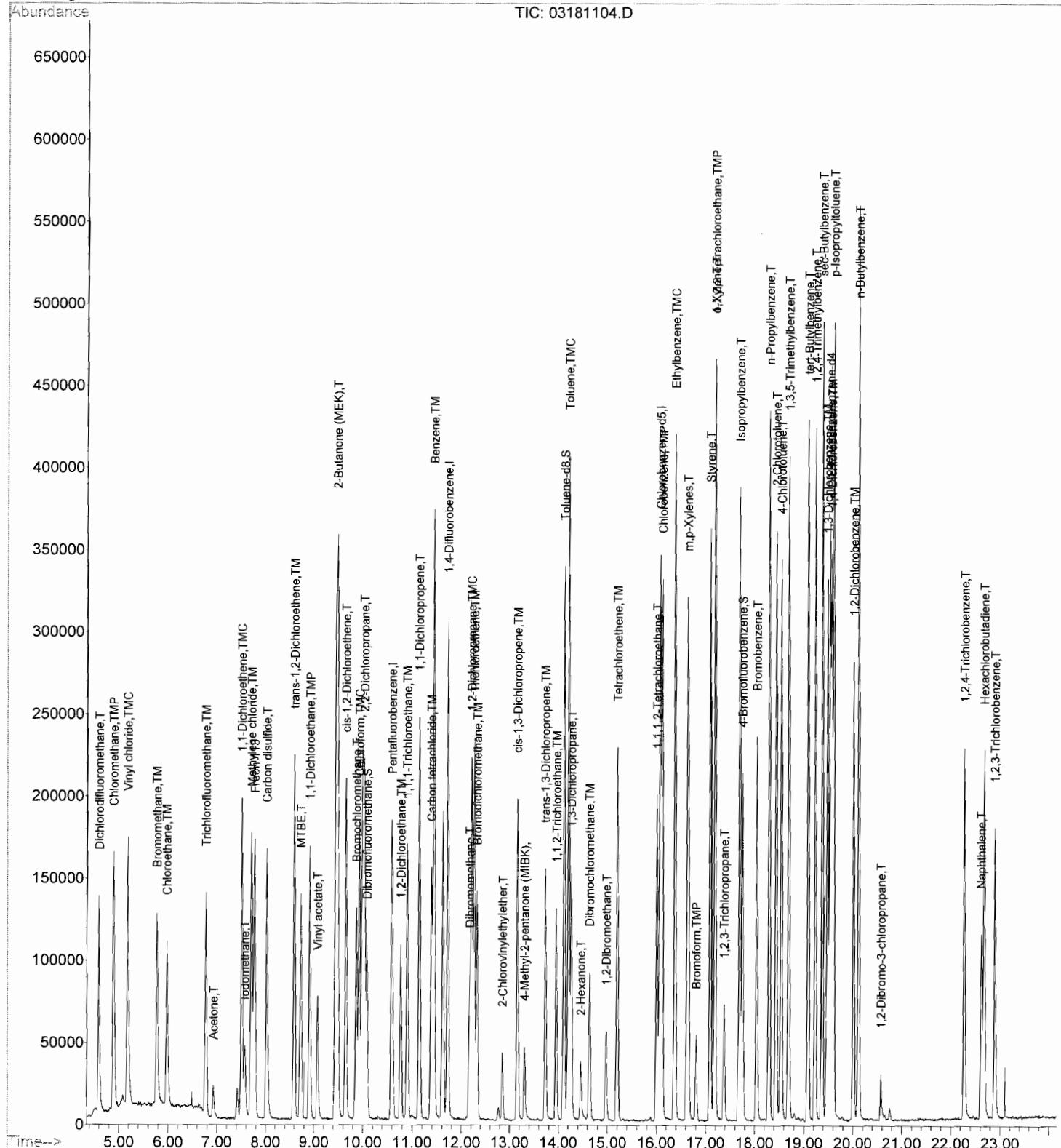
03181104.D 031711.M Fri Mar 18 12:04:44 2011

V Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D Vial: 10  
Acq On : 18 Mar 2011 8:57 am Operator: LC  
Sample : 20 PPB CCV Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 12:04 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D Vial: 12  
 Acq On : 18 Mar 2011 9:28 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

3/21/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	182246	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	312595	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	260286	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	121474	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	97638	21.29	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.16%	
39) Toluene-d8	14.11	98	344883	21.88	ug/L	0.00
Spiked Amount	25.000		Recovery	=	87.52%	
53) 4-Bromofluorobenzene	17.75	95	121059	21.22	ug/L	0.00
Spiked Amount	25.000		Recovery	=	84.88%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	182948	21.25	ug/L	97
3) Chloromethane	4.89	50	314246	22.08	ug/L	99
4) Vinyl chloride	5.18	62	280737	22.15	ug/L	99
5) Bromomethane	5.78	94	135984	20.65	ug/L	99
6) Chloroethane	5.98	64	142496	21.21	ug/L	98
7) Trichlorofluoromethane	6.77	101	172056	19.53	ug/L	98
8) Acetone	6.93	43	31094	28.97	ug/L	99
9) Iodomethane	7.57	142	100662	24.71	ug/L	98
10) 1,1-Dichloroethene	7.51	96	105539	20.53	ug/L	99
11) Methylene chloride	7.71	84	123339	20.40	ug/L	97
12) Freon 113	7.77	101	123416	20.28	ug/L	99
13) Carbon disulfide	8.02	76	442180	24.18	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	118570	20.85	ug/L	99
15) MTBE	8.73	73	188026	19.35	ug/L	100
16) 1,1-Dichloroethane	8.92	63	239379	20.18	ug/L	99
17) Vinyl acetate	9.08	43	235500	25.56	ug/L	100
18) 2-Butanone (MEK)	9.47	72	6862	24.13	ug/L	65
19) cis-1,2-Dichloroethene	9.65	96	117987	20.03	ug/L	98
20) Bromochloromethane	9.86	128	44531	20.66	ug/L	93
21) Chloroform	9.92	83	194653	19.88	ug/L	100
22) 2,2-Dichloropropane	10.03	77	169158	21.31	ug/L	99
24) 1,2-Dichloroethane	10.77	62	120404	20.15	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	148836	21.17	ug/L	99
27) 1,1-Dichloropropene	11.14	75	174100	21.76	ug/L	99
28) Carbon tetrachloride	11.39	117	122228	22.12	ug/L	99
29) Benzene	11.44	78	438739	20.51	ug/L	99
30) Dibromomethane	12.16	93	53588	21.17	ug/L	99
31) 1,2-Dichloropropane	12.20	63	127359	21.31	ug/L	99
32) Trichloroethene	12.26	95	113932	21.30	ug/L	99
33) Bromodichloromethane	12.32	83	137464	21.89	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	31470	28.71	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	166307	21.82	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	73932	23.68	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	134449	22.85	ug/L	100
38) 1,1,2-Trichloroethane	13.94	83	60857	21.51	ug/L	99
40) Toluene	14.21	92	262154	21.55	ug/L	98
42) 1,3-Dichloropropane	14.27	76	125581	21.32	ug/L	98

(#) = qualifier out of range (m) = manual integration

03181105.D 031711.M Fri Mar 18 12:05:25 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D Vial: 12  
 Acq On : 18 Mar 2011 9:28 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	50927	25.93	ug/L #	96
44) Dibromochloromethane	14.64	129	76883	21.71	ug/L	99
45) 1,2-Dibromoethane	14.98	107	65244	22.07	ug/L	99
46) Tetrachloroethene	15.20	166	101494	21.74	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	83912	21.77	ug/L	98
48) Chlorobenzene	16.12	112	264705	21.64	ug/L	100
49) Ethylbenzene	16.37	91	504751	21.90	ug/L	99
50) m,p-Xylenes	16.63	106	174150	21.57	ug/L	99
51) Styrene	17.09	104	278172	22.72	ug/L	99
52) o-Xylene	17.19	106	168060	21.42	ug/L	97
55) Bromoform	16.81	173	39843	22.65	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	80936	22.76	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	18587	24.02	ug/L	99
58) Isopropylbenzene	17.69	105	459105	24.68	ug/L	99
59) Bromobenzene	18.04	156	98916	23.05	ug/L	100
60) n-Propylbenzene	18.30	91	622654	23.45	ug/L	100
61) 2-Chlorotoluene	18.44	91	339207	21.80	ug/L	100
62) 4-Chlorotoluene	18.54	91	353005	22.89	ug/L	98
63) 1,3,5-Trimethylbenzene	18.69	105	372674	23.19	ug/L	100
64) tert-Butylbenzene	19.08	119	307984	22.51	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	376349	23.29	ug/L	100
66) sec-Butylbenzene	19.38	105	525907	22.42	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	194463	22.24	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	195820	22.24	ug/L	98
69) p-Isopropyltoluene	19.60	119	411186	22.94	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	167002	21.96	ug/L	99
71) n-Butylbenzene	20.11	91	462490	23.18	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	11249	23.73	ug/L	94
73) 1,2,4-Trichlorobenzene	22.27	180	118367	24.10	ug/L	100
74) Naphthalene	22.62	128	150647	23.13	ug/L	100
75) Hexachlorobutadiene	22.68	225	74201	23.65	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	93730	23.40	ug/L	98

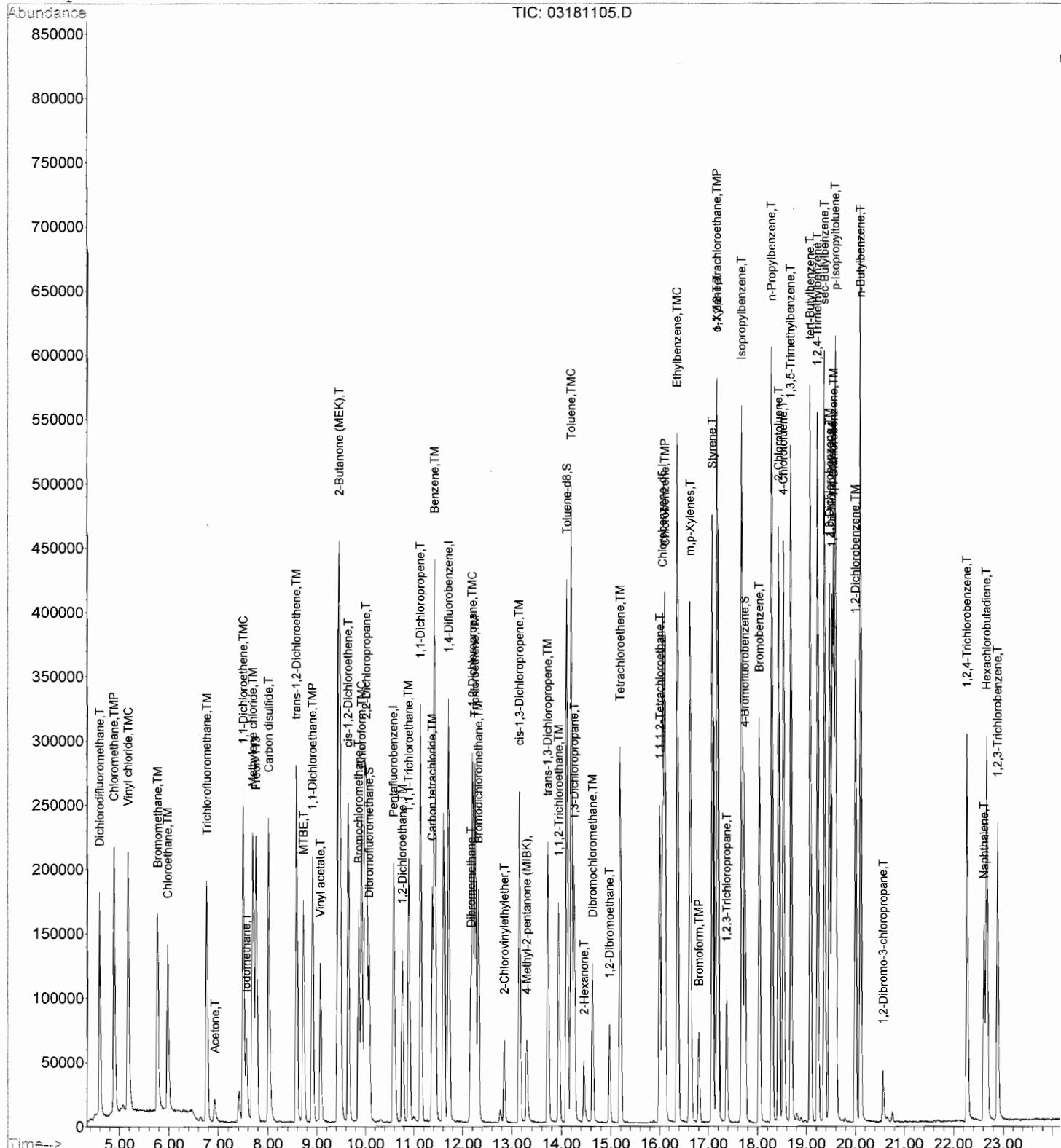
(#) = qualifier out of range (m) = manual integration

03181105.D 031711.M Fri Mar 18 12:05:25 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D Vial: 12  
 Acq On : 18 Mar 2011 9:28 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D Vial: 13  
 Acq On : 18 Mar 2011 9:58 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

13/21/11e

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	175804	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	306741	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	252270	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	117522	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	96696	21.86	ug/L	0.00
Spiked Amount	25.000		Recovery	=	87.44%	
39) Toluene-d8	14.11	98	334399	21.62	ug/L	-0.01
Spiked Amount	25.000		Recovery	=	86.48%	
53) 4-Bromofluorobenzene	17.75	95	118487	21.43	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.72%	

## Target Compounds

				Qvalue	
2) Dichlorodifluoromethane	4.59	85	180997	21.79	ug/L
3) Chloromethane	4.89	50	318533	23.20	ug/L
4) Vinyl chloride	5.18	62	274420	22.45	ug/L
5) Bromomethane	5.77	94	141075	22.19	ug/L
6) Chloroethane	5.98	64	144438	22.28	ug/L
7) Trichlorofluoromethane	6.77	101	207424	24.40	ug/L
8) Acetone	6.93	43	31757	30.90	ug/L
9) Iodomethane	7.57	142	113288	28.80	ug/L
10) 1,1-Dichloroethene	7.51	96	108122	21.81	ug/L
11) Methylene chloride	7.70	84	121648	20.85	ug/L
12) Freon 113	7.77	101	122012	20.78	ug/L
13) Carbon disulfide	8.02	76	438717	24.87	ug/L
14) trans-1,2-Dichloroethene	8.59	96	120249	21.92	ug/L
15) MTBE	8.73	73	189019	20.16	ug/L
16) 1,1-Dichloroethane	8.91	63	245777	21.47	ug/L
17) Vinyl acetate	9.07	43	228970	25.76	ug/L
18) 2-Butanone (MEK)	9.46	72	6704	24.43	ug/L
19) cis-1,2-Dichloroethene	9.65	96	114286	20.12	ug/L
20) Bromochloromethane	9.87	128	44372	21.34	ug/L
21) Chloroform	9.92	83	196139	20.77	ug/L
22) 2,2-Dichloropropane	10.03	77	164872	21.53	ug/L
24) 1,2-Dichloroethane	10.77	62	120017	20.82	ug/L
25) 1,1,1-Trichloroethane	10.90	97	147857	21.80	ug/L
27) 1,1-Dichloropropene	11.14	75	173644	22.11	ug/L
28) Carbon tetrachloride	11.38	117	123105	22.71	ug/L
29) Benzene	11.44	78	443552	21.13	ug/L
30) Dibromomethane	12.16	93	53816	21.67	ug/L
31) 1,2-Dichloropropane	12.21	63	126500	21.57	ug/L
32) Trichloroethene	12.26	95	112981	21.52	ug/L
33) Bromodichloromethane	12.32	83	130685	21.21	ug/L
34) 2-Chlorovinylethylether	12.85	63	37137	34.83	ug/L
35) cis-1,3-Dichloropropene	13.16	75	163208	21.82	ug/L
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	71123	23.21	ug/L
37) trans-1,3-Dichloropropene	13.73	75	128270	22.22	ug/L
38) 1,1,2-Trichloroethane	13.95	83	59287	21.36	ug/L
40) Toluene	14.21	92	265245	22.22	ug/L
42) 1,3-Dichloropropane	14.27	76	121210	21.23	ug/L

(#) = qualifier out of range (m) = manual integration

03181106.D 031711.M Fri Mar 18 12:06:02 2011

13/21/11e  
VE 03/21/11  
Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D Vial: 13  
 Acq On : 18 Mar 2011 9:58 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

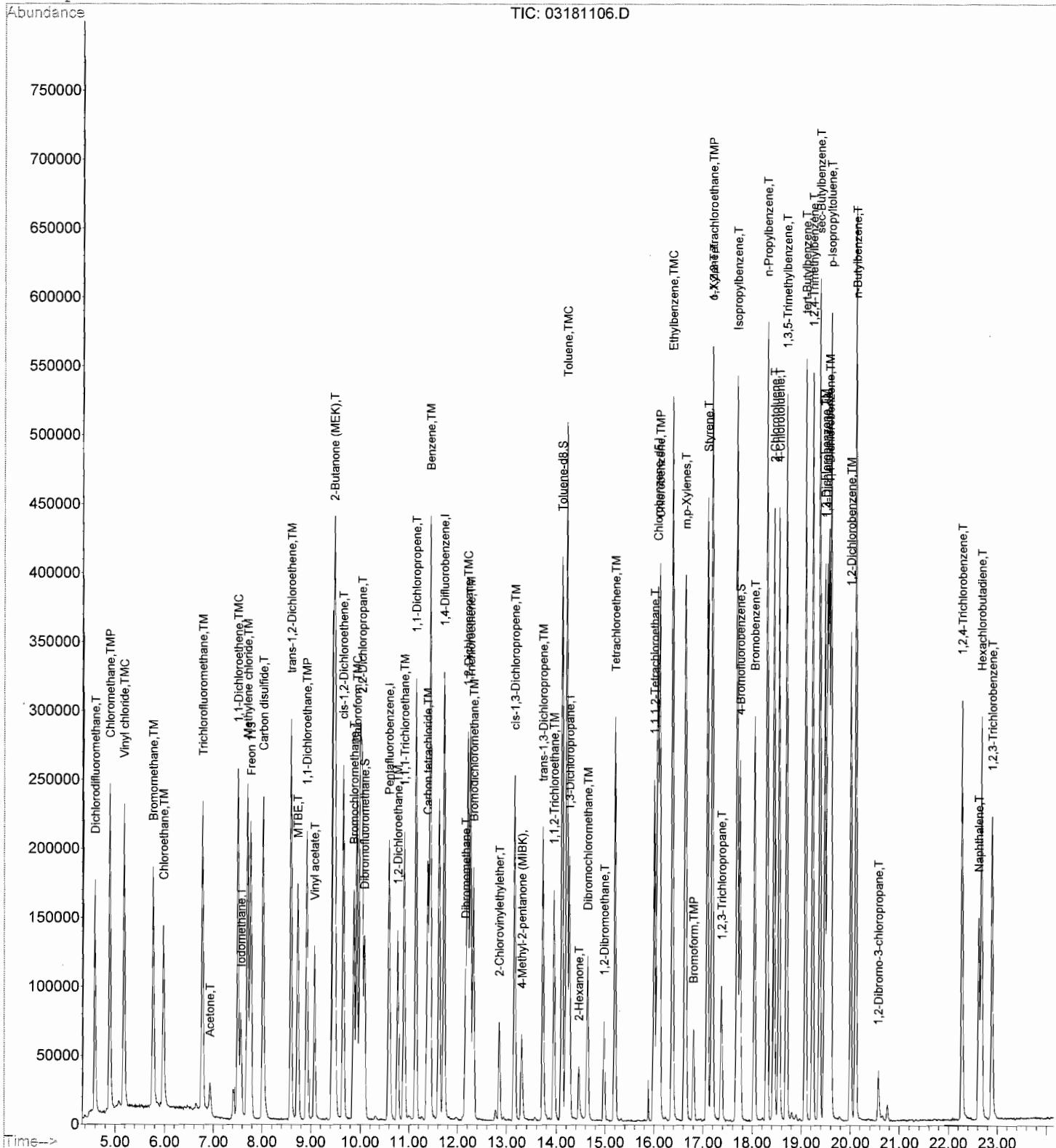
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	43474	22.84	ug/L	# 99
44) Dibromochloromethane	14.64	129	75269	21.93	ug/L	100
45) 1,2-Dibromoethane	14.98	107	62868	21.94	ug/L	100
46) Tetrachloroethene	15.20	166	100471	22.21	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	80680	21.60	ug/L	98
48) Chlorobenzene	16.12	112	257066	21.68	ug/L	100
49) Ethylbenzene	16.37	91	488012	21.85	ug/L	100
50) m,p-Xylenes	16.63	106	172861	22.09	ug/L	99
51) Styrene	17.09	104	267379	22.53	ug/L	99
52) o-Xylene	17.19	106	161099	21.18	ug/L	98
55) Bromoform	16.81	173	37612	22.10	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.17	83	74403	21.62	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	16478	22.01	ug/L	95
58) Isopropylbenzene	17.69	105	449329	24.97	ug/L	100
59) Bromobenzene	18.04	156	94783	22.83	ug/L	100
60) n-Propylbenzene	18.30	91	600401	23.37	ug/L	100
61) 2-Chlorotoluene	18.44	91	330443	21.95	ug/L	99
62) 4-Chlorotoluene	18.54	91	337065	22.59	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	354260	22.78	ug/L	99
64) tert-Butylbenzene	19.08	119	296080	22.36	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	362793	23.21	ug/L	100
66) sec-Butylbenzene	19.37	105	515360	22.71	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	188143	22.24	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	187866	22.06	ug/L	99
69) p-Isopropyltoluene	19.61	119	401057	23.12	ug/L	100
70) 1,2-Dichlorobenzene	20.00	146	161564	21.96	ug/L	99
71) n-Butylbenzene	20.11	91	449063	23.26	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	10233	22.32	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	116766	24.57	ug/L	98
74) Naphthalene	22.62	128	147814	23.45	ug/L	100
75) Hexachlorobutadiene	22.67	225	71796	23.66	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	92276	23.82	ug/L	99

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D Vial: 13  
 Acq On : 18 Mar 2011 9:58 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181107.D Vial: 16  
 Acq On : 18 Mar 2011 10:29 am Operator: LC  
 Sample : -BLK1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:06 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

✓ 3/21/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	181068	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	320896	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	263768	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	119729	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	97358	21.37	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.48%	
39) Toluene-d8	14.11	98	346709	21.42	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.68%	
53) 4-Bromofluorobenzene	17.74	95	119348	20.64	ug/L	0.00
Spiked Amount	25.000		Recovery	=	82.56%	

## Target Compounds

5) Bromomethane	5.71	94	166	0.28	ug/L	NSW 92
8) Acetone	6.93	43	1482	Below Cal	#LRF	65
9) Iodomethane	7.58	142	159	0.17	ug/L	#NSW 32
42) 1,3-Dichloropropane	14.11	76	3902	0.65	ug/L	#NSW 68
73) 1,2,4-Trichlorobenzene	22.28	180	828	0.17	ug/L	#NSW 82
74) Naphthalene	22.63	128	8346	1.30	ug/L	100 ✓
76) 1,2,3-Trichlorobenzene	22.90	180	793	0.20	ug/L	# 56

(#) = qualifier out of range (m) = manual integration

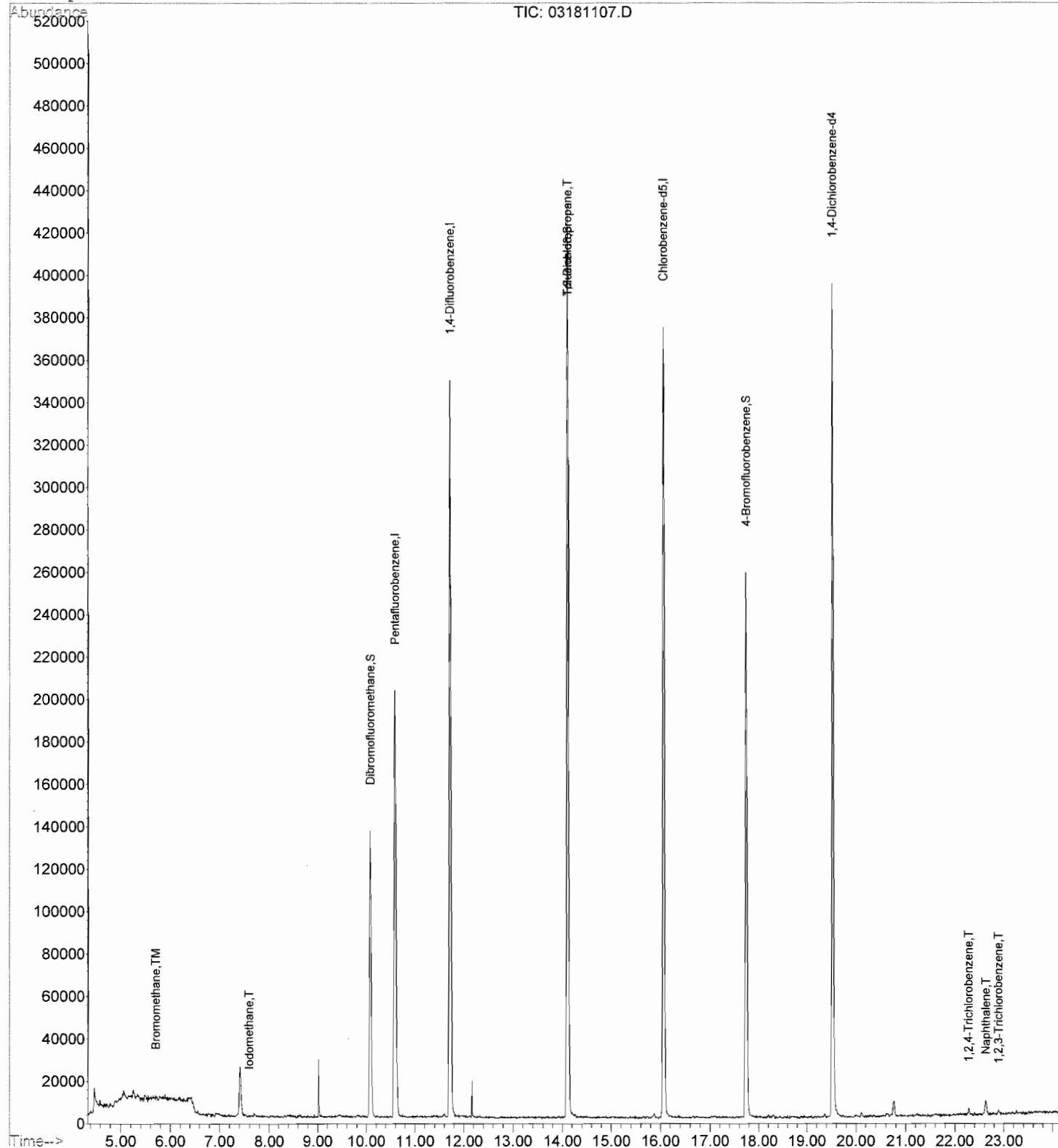
03181107.D 031711.M Fri Mar 18 12:06:26 2011

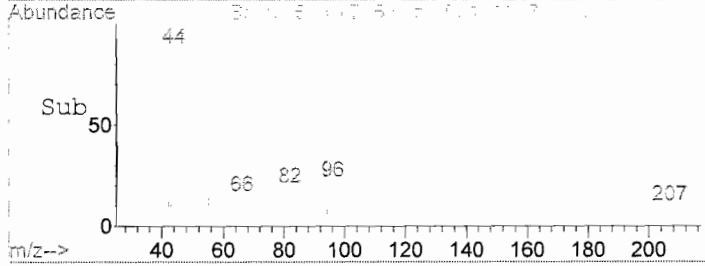
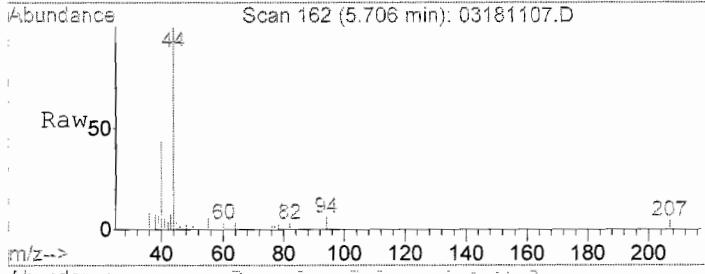
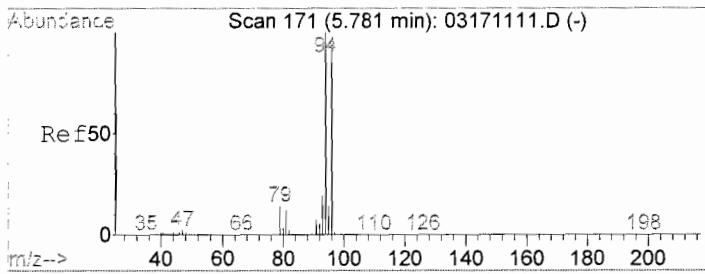
✓ 03/21/11

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181107.D Vial: 16  
 Acq On : 18 Mar 2011 10:29 am Operator: LC  
 Sample : -BLK1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:06 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

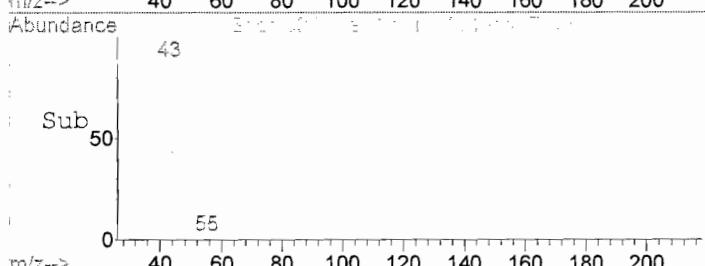
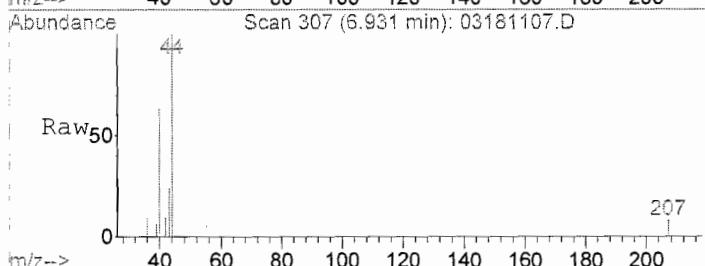
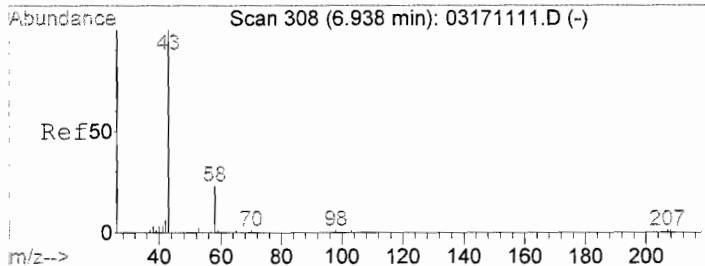
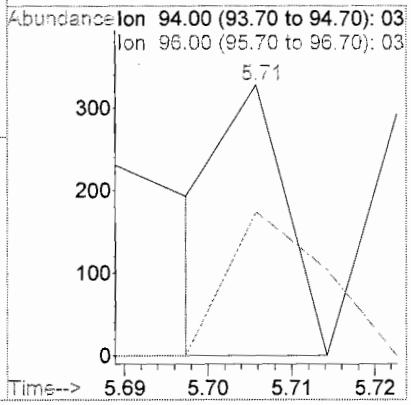




#5  
Bromomethane  
Concen: 0.28 ug/L  
RT: 5.71 min Scan# 162  
Delta R.T. -0.07 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

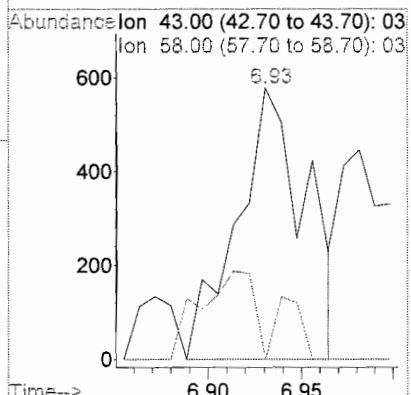
*W5W*

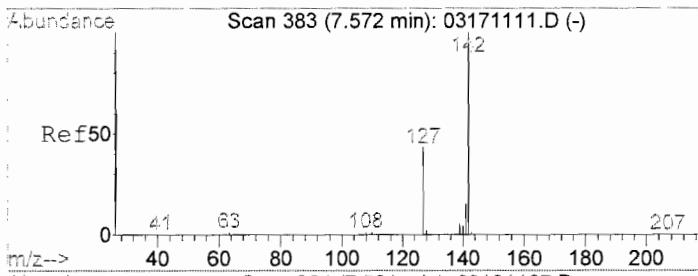
Tgt Ion: 94 Resp: 166  
Ion Ratio Lower Upper  
94 100  
96 84.9 74.0 111.0



#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 307  
Delta R.T. -0.01 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

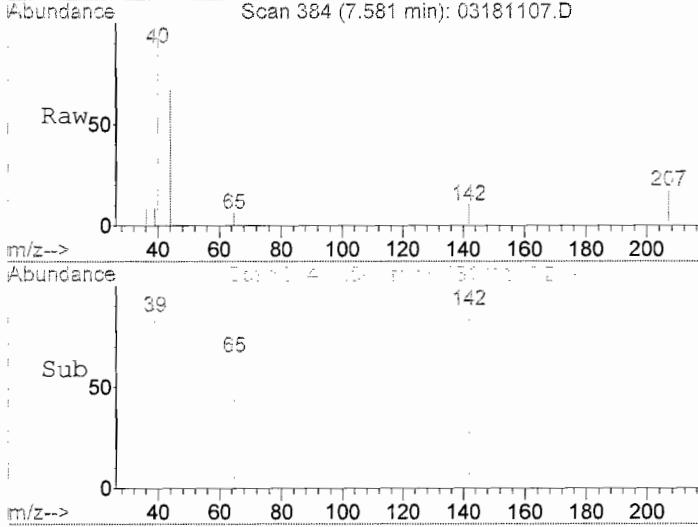
Tgt Ion: 43 Resp: 1482  
Ion Ratio Lower Upper  
43 100  
58 8.7 21.2 31.8#



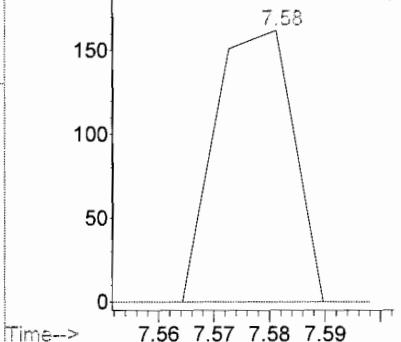


#9  
Iodomethane  
Concen: 0.17 ug/L  
RT: 7.58 min Scan# 384  
Delta R.T. 0.01 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

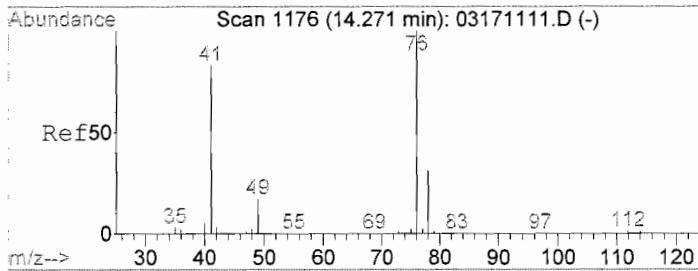
*W.S.M.*



Abundance Ion 142.00 (141.70 to 142.70):  
Ion 127.00 (126.70 to 127.70):

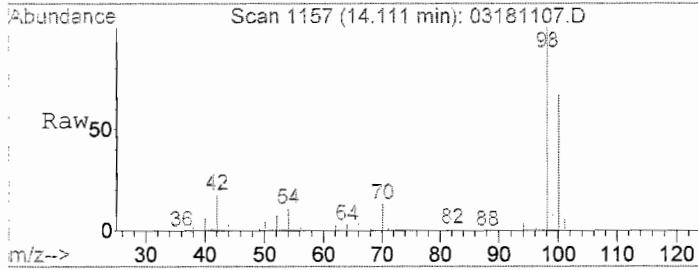


*J*

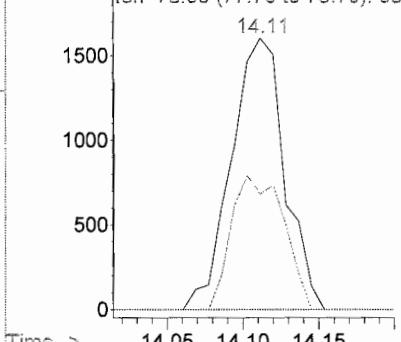


#42  
1,3-Dichloropropane  
Concen: 0.65 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

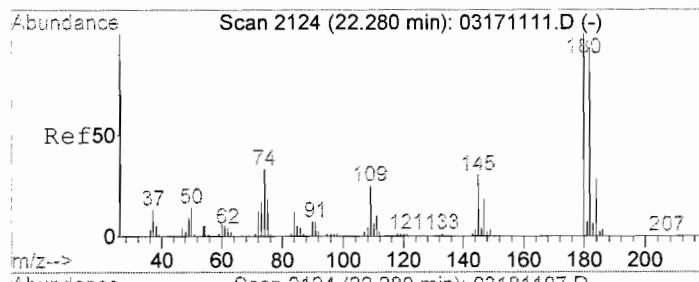
*W.R.T.*



Abundance Ion 76.00 (75.70 to 76.70): 03  
Ion 78.00 (77.70 to 78.70): 03

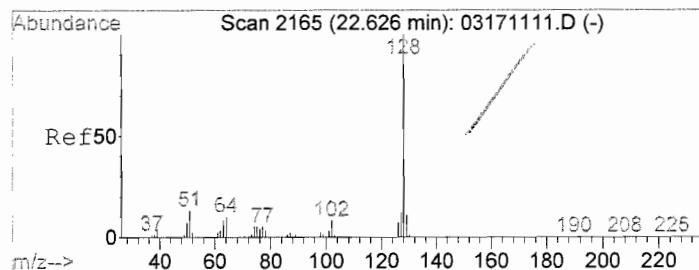
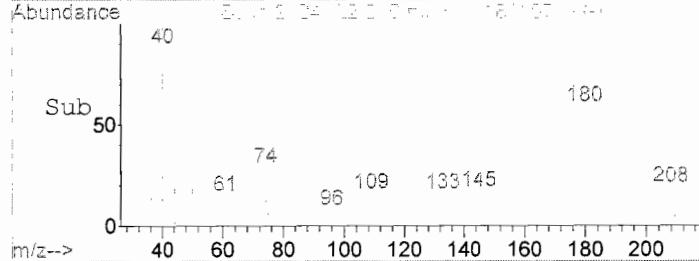
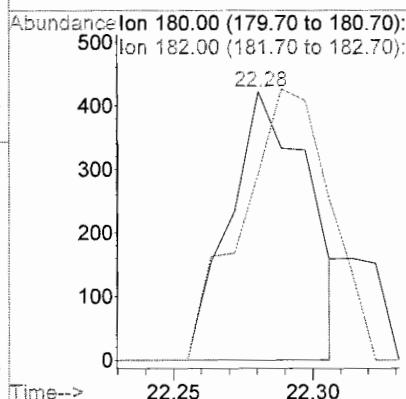
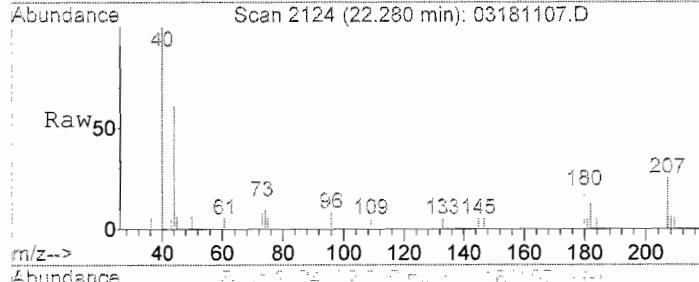


*CC*



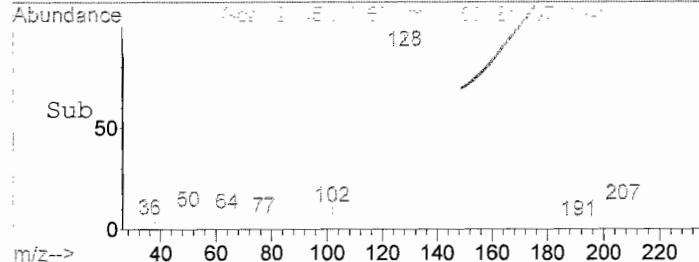
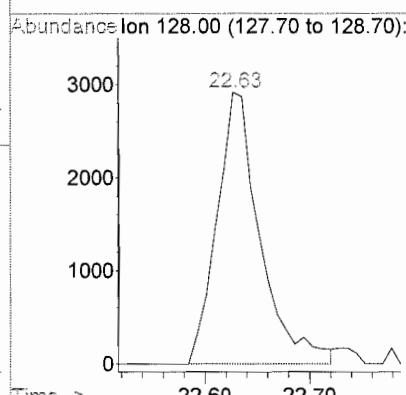
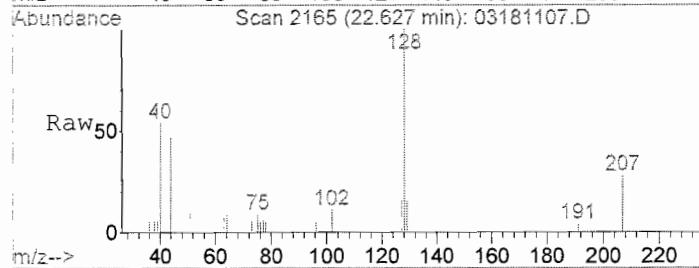
#73  
1,2,4-Trichlorobenzene  
Concen: 0.17 ug/L  
RT: 22.28 min Scan# 2124  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

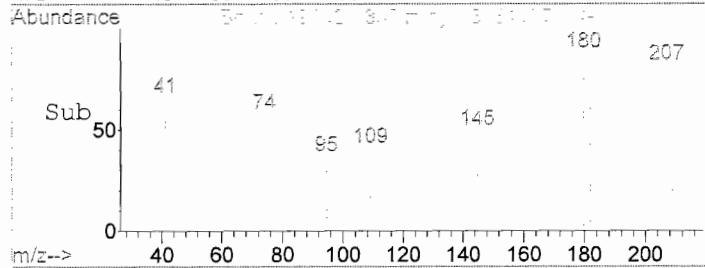
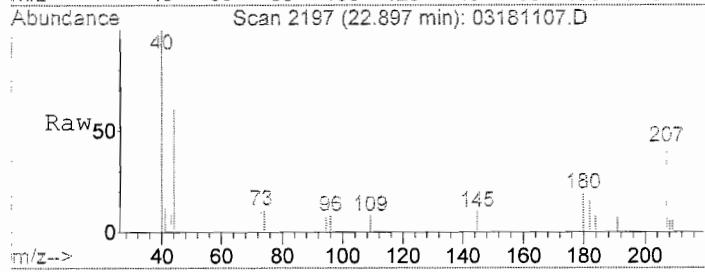
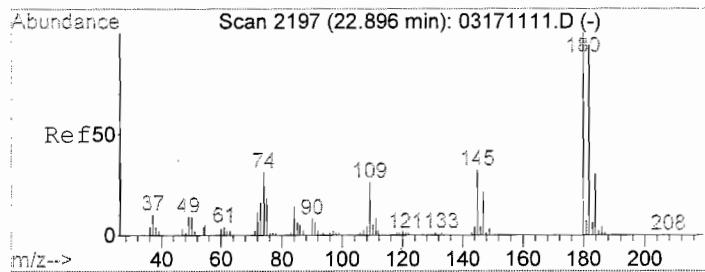
Tgt Ion:180 Resp: 828  
Ion Ratio Lower Upper  
180 100  
182 113.4 76.5 114.7



#74  
Naphthalene  
Concen: 1.30 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

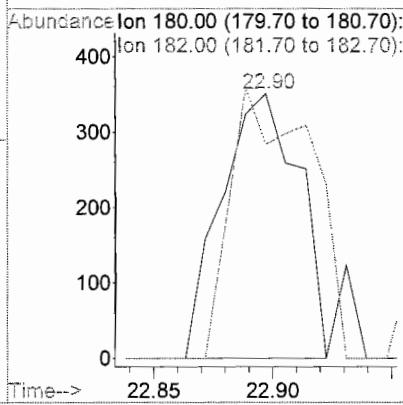
Tgt Ion:128 Resp: 8346





#76  
1,2,3-Trichlorobenzene  
Concen: 0.20 ug/L  
RT: 22.90 min Scan# 2197  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

Tgt Ion:180 Resp: 793  
Ion Ratio Lower Upper  
180 100  
182 52.5 76.1 114.1#



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181110.D Vial: 3  
 Acq On : 18 Mar 2011 12:01 pm Operator: LC  
 Sample : PUC0827-02 Inst : GCMS7  
 Misc : SOURCE Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

✓ 3/21/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	173163	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	306651	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	264627	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	119070	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	96676	22.19	ug/L	0.00
Spiked Amount	25.000		Recovery	=	88.76%	
39) Toluene-d8	14.11	98	343395	22.20	ug/L	0.00
Spiked Amount	25.000		Recovery	=	88.80%	
53) 4-Bromofluorobenzene	17.75	95	123364	21.27	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.08%	

## Target Compounds

				Qvalue	
5) Bromomethane	5.73	94	199	0.29 ug/L	NSM 92
8) Acetone	6.94	43	3295	Below Cal	LP4/NT 93
15) MTBE	8.73	73	847	0.09 ug/L	#↓ 86
21) Chloroform	9.92	83	11200	1.20 ug/L	✓ 99
24) 1,2-Dichloroethane	10.59	62	787	0.14 ug/L	#WRT 1
32) Trichloroethene	12.26	95	2110	0.40 ug/L	LC4/NT 96
42) 1,3-Dichloropropane	14.11	76	3460	0.58 ug/L	#WRT 51
43) 2-Hexanone	14.44	43	187	0.09 ug/L	#LC4/NT 29
46) Tetrachloroethene	15.20	166	8950	1.89 ug/L	99

✓ 3/21/11

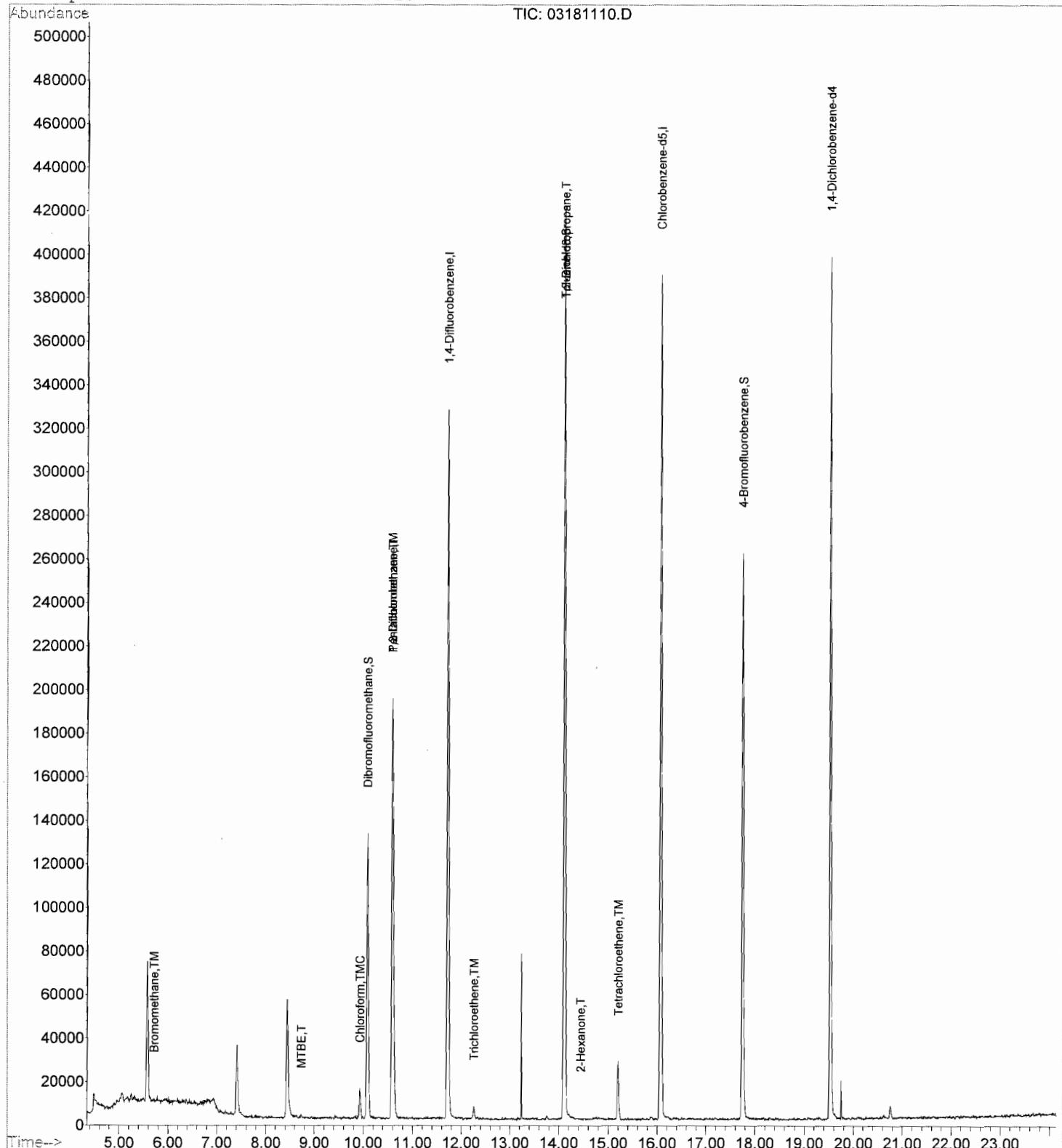
(#) = qualifier out of range (m) = manual integration

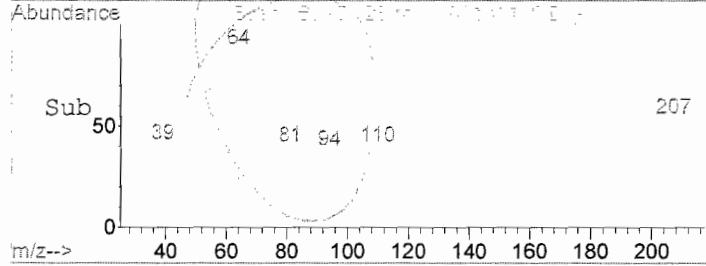
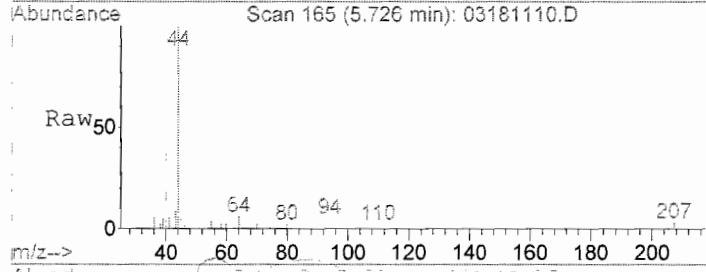
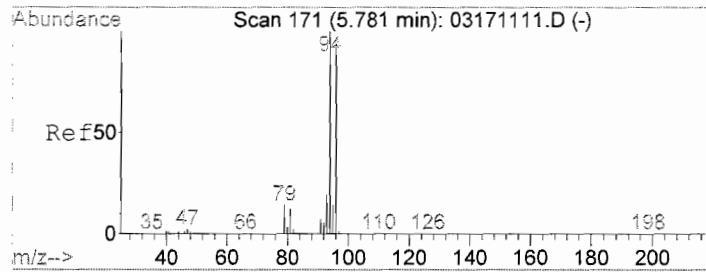
03181110.D 031711.M Fri Mar 18 13:00:47 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181110.D Vial: 3  
 Acq On : 18 Mar 2011 12:01 pm Operator: LC  
 Sample : PUC0827-02 Inst : GCMS7  
 Misc : SOURCE Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



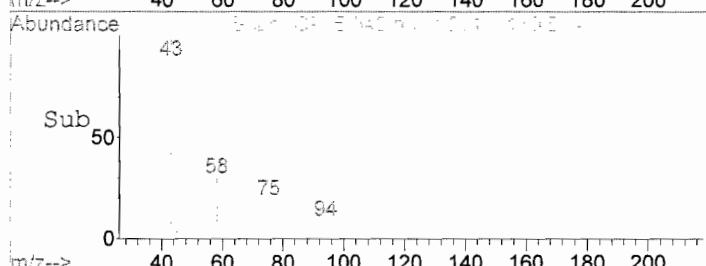
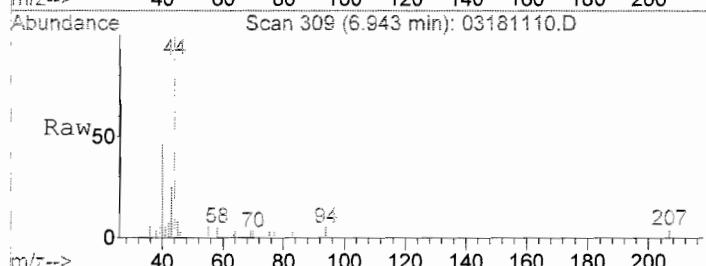
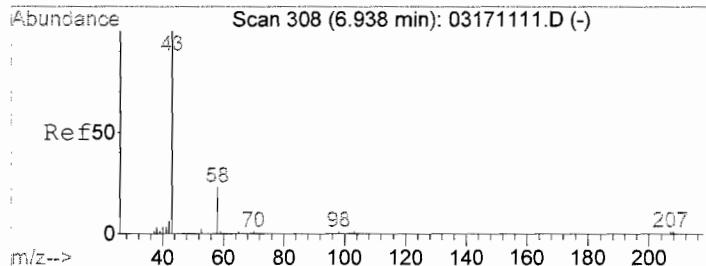
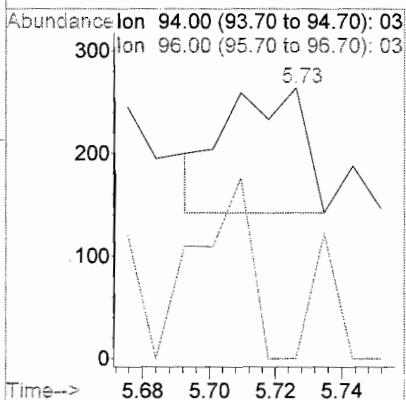


#5  
 Bromomethane  
 Concen: 0.29 ug/L  
 RT: 5.73 min Scan# 165  
 Delta R.T. -0.05 min  
 Lab File: 03181110.D  
 Acq: 18 Mar 2011 12:01 pm

*NSM*

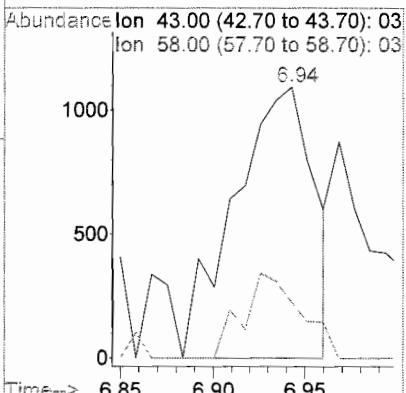
Tgt Ion: 94 Resp: 199  
 Ion Ratio Lower Upper  
 94 100  
 96 100.5 74.0 111.0

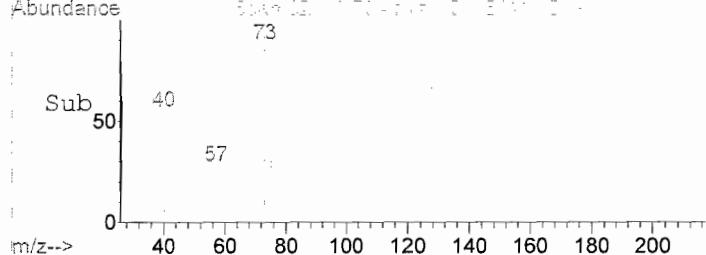
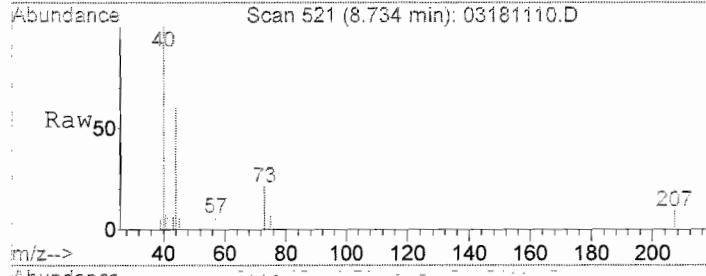
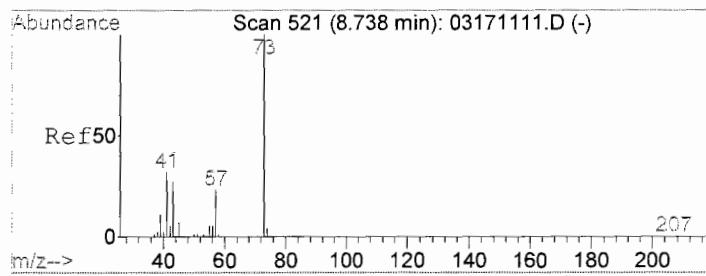
*F*



#8  
 Acetone  
 Concen: Below Cal  
 RT: 6.94 min Scan# 309  
 Delta R.T. 0.00 min  
 Lab File: 03181110.D  
 Acq: 18 Mar 2011 12:01 pm

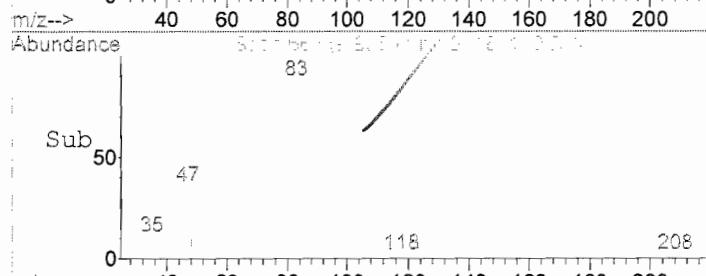
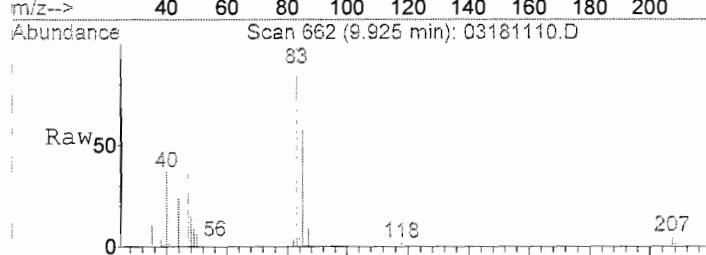
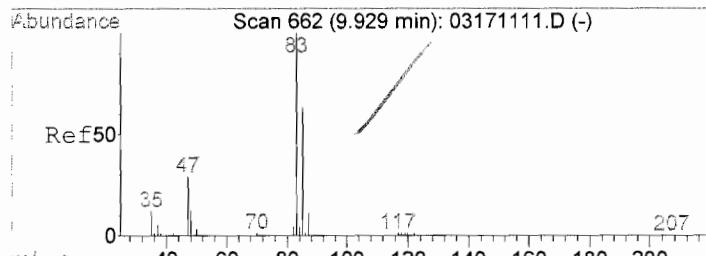
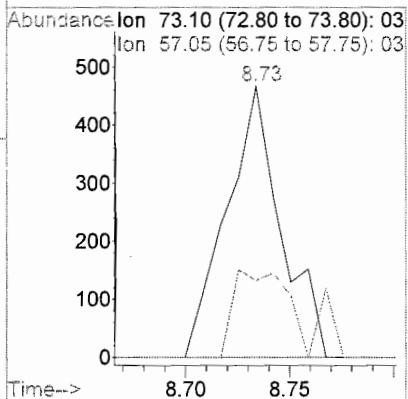
Tgt Ion: 43 Resp: 3295  
 Ion Ratio Lower Upper  
 43 100  
 58 22.9 21.2 31.8





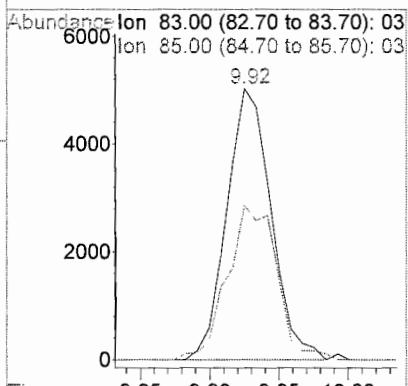
#15  
MTBE  
Concen: 0.09 ug/L  
RT: 8.73 min Scan# 521  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

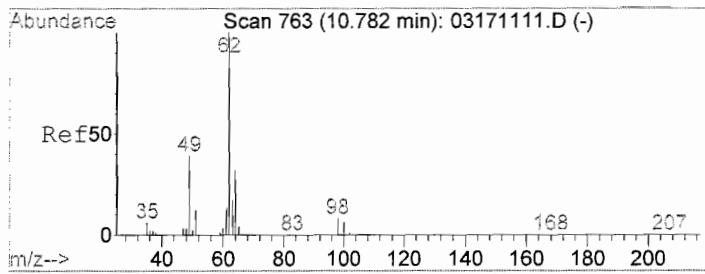
Tgt Ion: 73 Resp: 847  
Ion Ratio Lower Upper  
73 100  
57 31.9 20.0 30.0#



#21  
Chloroform  
Concen: 1.20 ug/L  
RT: 9.92 min Scan# 662  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

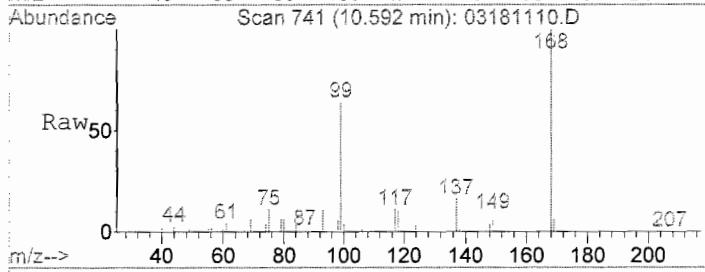
Tgt Ion: 83 Resp: 11200  
Ion Ratio Lower Upper  
83 100  
85 63.6 51.6 77.4



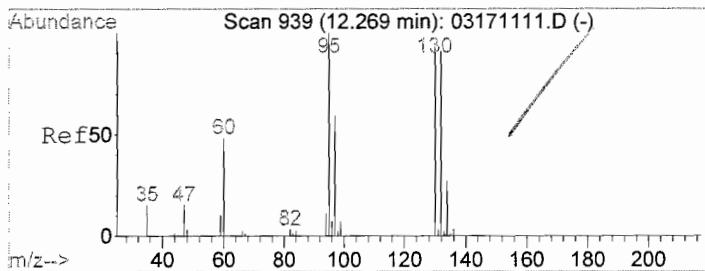
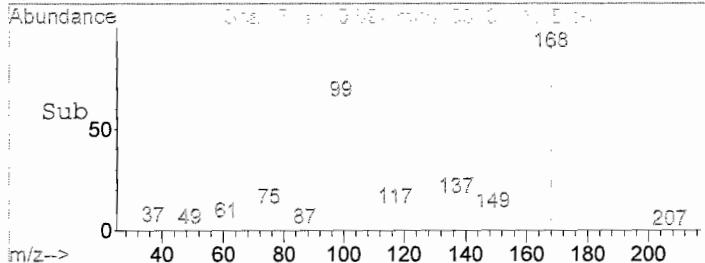
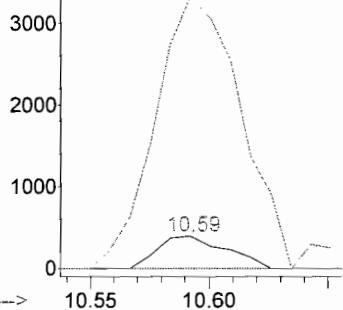


#24  
1,2-Dichloroethane  
Concen: 0.14 ug/L  
RT: 10.59 min Scan# 741  
Delta R.T. -0.19 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion: 62 Resp: 787  
Ion Ratio Lower Upper  
62 100  
98 1050.8 7.0 10.6#

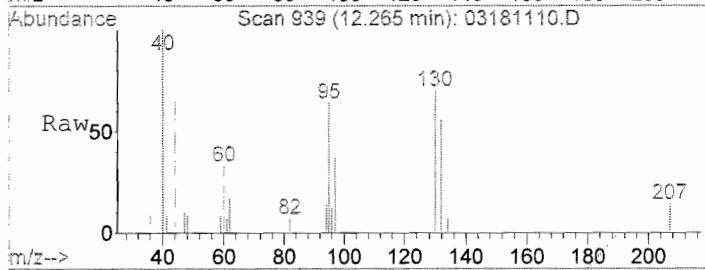


Abundance Ion 62.00 (61.70 to 62.70): 03  
Ion 98.00 (97.70 to 98.70): 03

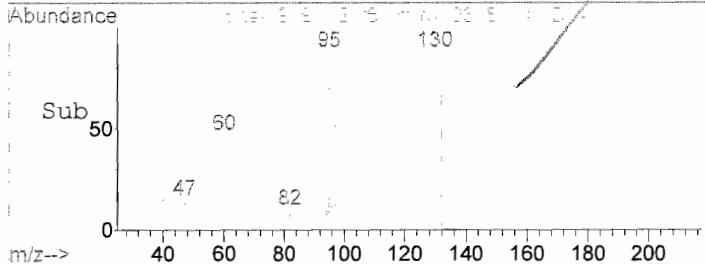
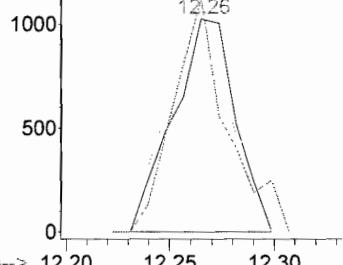


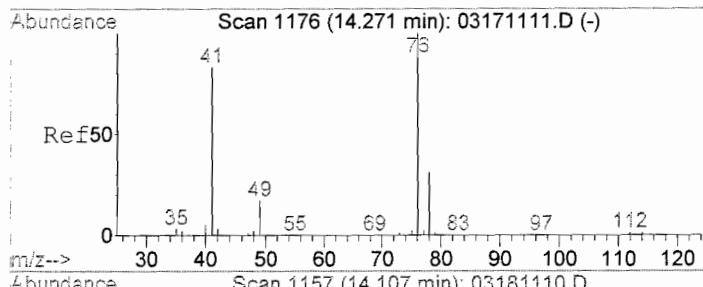
#32  
Trichloroethene  
Concen: 0.40 ug/L  
RT: 12.26 min Scan# 939  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion: 95 Resp: 2110  
Ion Ratio Lower Upper  
95 100  
130 94.0 74.2 111.4  
132 95.0 70.8 106.2



Abundance Ion 95.00 (94.70 to 95.70): 03  
Ion 130.00 (129.70 to 130.70): 03



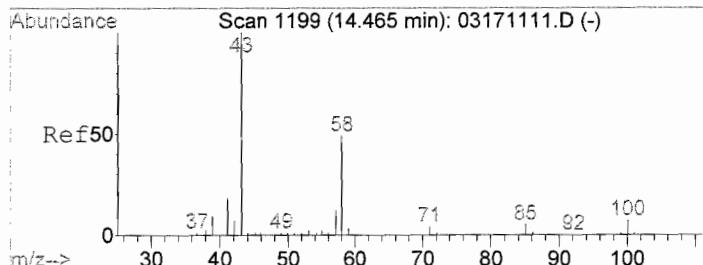
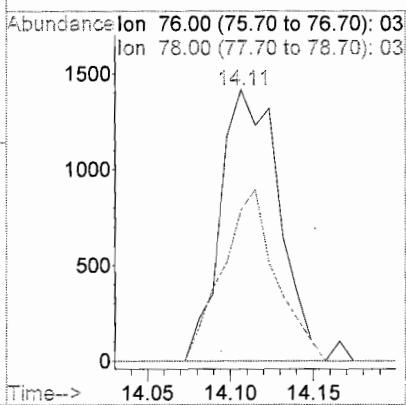
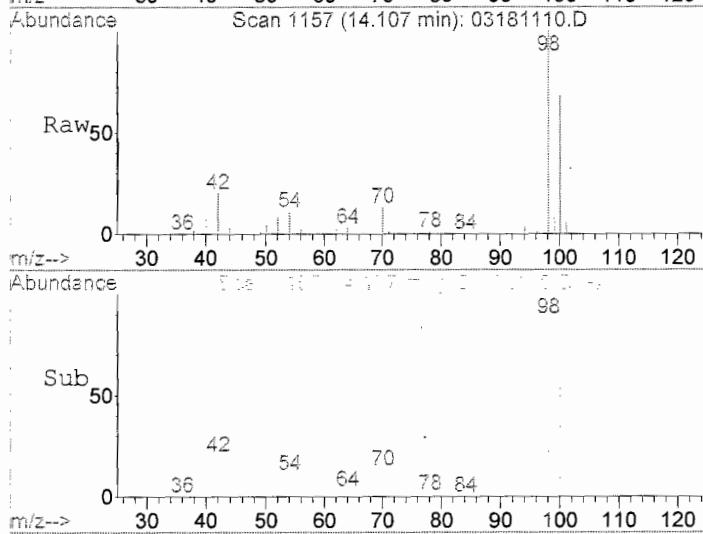


#42  
1,3-Dichloropropane  
Concen: 0.58 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

WT

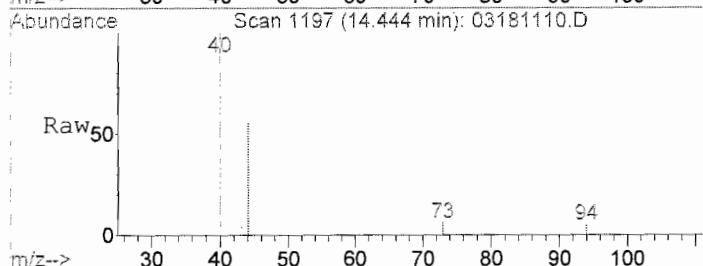
Tgt Ion: 76 Resp: 3460  
Ion Ratio Lower Upper  
76 100  
78 57.7 24.6 37.0#

F



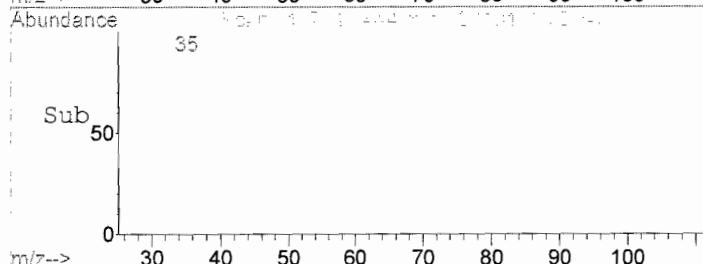
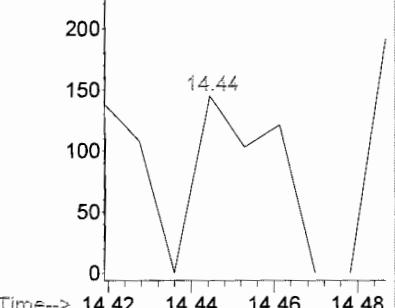
#43  
2-Hexanone  
Concen: 0.09 ug/L  
RT: 14.44 min Scan# 1197  
Delta R.T. -0.02 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion: 43 Resp: 187  
Ion Ratio Lower Upper  
43 100  
58 0.0 38.2 57.4#  
100 0.0 0.0 0.0

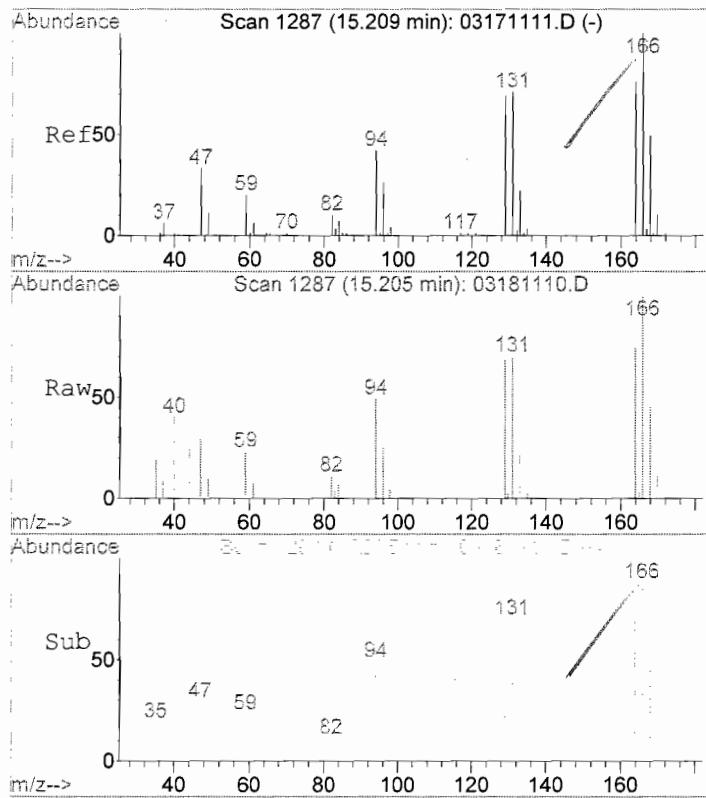


Abundance

Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03

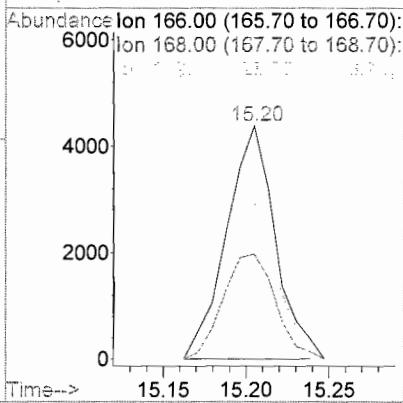


Sub



#46  
Tetrachloroethene  
Concen: 1.89 ug/L  
RT: 15.20 min Scan# 1287  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion:166 Resp: 8950  
Ion Ratio Lower Upper  
166 100  
168 48.3 37.9 56.9  
129 75.0 59.8 89.8



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D Vial: 4  
 Acq On : 18 Mar 2011 12:32 pm Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/21/12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	175360	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	309722	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	259868	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	120935	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	97936	22.20	ug/L	0.00
Spiked Amount	25.000		Recovery	=	88.80%	
39) Toluene-d8	14.11	98	340219	21.78	ug/L	0.00
Spiked Amount	25.000		Recovery	=	87.12%	
53) 4-Bromofluorobenzene	17.75	95	122265	21.47	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.88%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.59	85	187975	22.69 ug/L 98
3) Chloromethane	4.90	50	301362	22.00 ug/L 98
4) Vinyl chloride	5.18	62	286850	23.52 ug/L 99
5) Bromomethane	5.78	94	139537	22.00 ug/L 98
6) Chloroethane	5.98	64	157362	24.34 ug/L 97
7) Trichlorofluoromethane	6.77	101	229586	27.08 ug/L 99
8) Acetone	6.93	43	31918	31.17 ug/L 96
9) Iodomethane	7.57	142	139617	35.56 ug/L 100
10) 1,1-Dichloroethene	7.51	96	132685	26.83 ug/L 96
11) Methylene chloride	7.70	84	155716	26.76 ug/L 100
12) Freon 113	7.77	101	154689	26.42 ug/L 99
13) Carbon disulfide	8.02	76	536186	30.47 ug/L 100
14) trans-1,2-Dichloroethene	8.60	96	122531	22.39 ug/L 96
15) MTBE	8.73	73	208246	22.27 ug/L 99
16) 1,1-Dichloroethane	8.92	63	250145	21.91 ug/L 99
17) Vinyl acetate	9.08	43	248788	28.06 ug/L 100
18) 2-Butanone (MEK)	9.47	72	7031	25.64 ug/L 62
19) cis-1,2-Dichloroethene	9.66	96	122924	21.69 ug/L 99
20) Bromochloromethane	9.87	128	46868	22.60 ug/L 98
21) Chloroform	9.93	83	216682	23.00 ug/L 99
22) 2,2-Dichloropropane	10.03	77	168655	22.08 ug/L 99
24) 1,2-Dichloroethane	10.78	62	131737	22.92 ug/L 98
25) 1,1,1-Trichloroethane	10.90	97	153677	22.72 ug/L 98
27) 1,1-Dichloropropene	11.15	75	178152	22.47 ug/L 99
28) Carbon tetrachloride	11.39	117	125329	22.90 ug/L 99
29) Benzene	11.44	78	457253	21.57 ug/L 99
30) Dibromomethane	12.16	93	58309	23.25 ug/L 99
31) 1,2-Dichloropropane	12.21	63	134198	22.67 ug/L 99
32) Trichloroethene	12.26	95	116844	22.04 ug/L 99
33) Bromodichloromethane	12.32	83	139583	22.43 ug/L 98
34) 2-Chlorovinylethylether	13.16	63	909	Below Cal # 55
35) cis-1,3-Dichloropropene	13.16	75	170102	22.52 ug/L 100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	77496	25.05 ug/L 98
37) trans-1,3-Dichloropropene	13.73	75	143203	24.57 ug/L 100
38) 1,1,2-Trichloroethane	13.95	83	63997	22.83 ug/L 99
40) Toluene	14.21	92	259965	21.57 ug/L 100
42) 1,3-Dichloropropane	14.27	76	134444	22.86 ug/L 97

(#= qualifier out of range (m) = manual integration

03181111.D 031711.M Fri Mar 18 13:01:08 2011

Page 1

Vc 03/21/12

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D Vial: 4  
 Acq On : 18 Mar 2011 12:32 pm Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	50509	25.76	ug/L	# 93
44) Dibromochloromethane	14.65	129	80218	22.69	ug/L	99
45) 1,2-Dibromoethane	14.98	107	69348	23.49	ug/L	98
46) Tetrachloroethene	15.20	166	111131	23.84	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	84525	21.96	ug/L	99
48) Chlorobenzene	16.12	112	265370	21.73	ug/L	99
49) Ethylbenzene	16.38	91	501400	21.79	ug/L	99
50) m,p-Xylenes	16.64	106	175688	21.80	ug/L	100
51) Styrene	17.09	104	261644	21.41	ug/L	100
52) o-Xylene	17.19	106	168774	21.54	ug/L	98
55) Bromoform	16.81	173	41647	23.78	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	84105	23.75	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	17541	22.77	ug/L	92
58) Isopropylbenzene	17.69	105	460294	24.86	ug/L	100
59) Bromobenzene	18.05	156	97907	22.92	ug/L	98
60) n-Propylbenzene	18.30	91	615806	23.29	ug/L	99
61) 2-Chlorotoluene	18.44	91	335850	21.68	ug/L	99
62) 4-Chlorotoluene	18.55	91	346950	22.60	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	365742	22.86	ug/L	99
64) tert-Butylbenzene	19.09	119	308158	22.62	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	375578	23.35	ug/L	99
66) sec-Butylbenzene	19.38	105	527950	22.61	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	198093	22.75	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	197959	22.59	ug/L	99
69) p-Isopropyltoluene	19.61	119	416242	23.32	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	172866	22.83	ug/L	99
71) n-Butylbenzene	20.11	91	466267	23.47	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	10925	23.15	ug/L	90
73) 1,2,4-Trichlorobenzene	22.28	180	124221	25.40	ug/L	97
74) Naphthalene	22.62	128	153258	23.63	ug/L	100
75) Hexachlorobutadiene	22.68	225	74012	23.70	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100939	25.32	ug/L	98

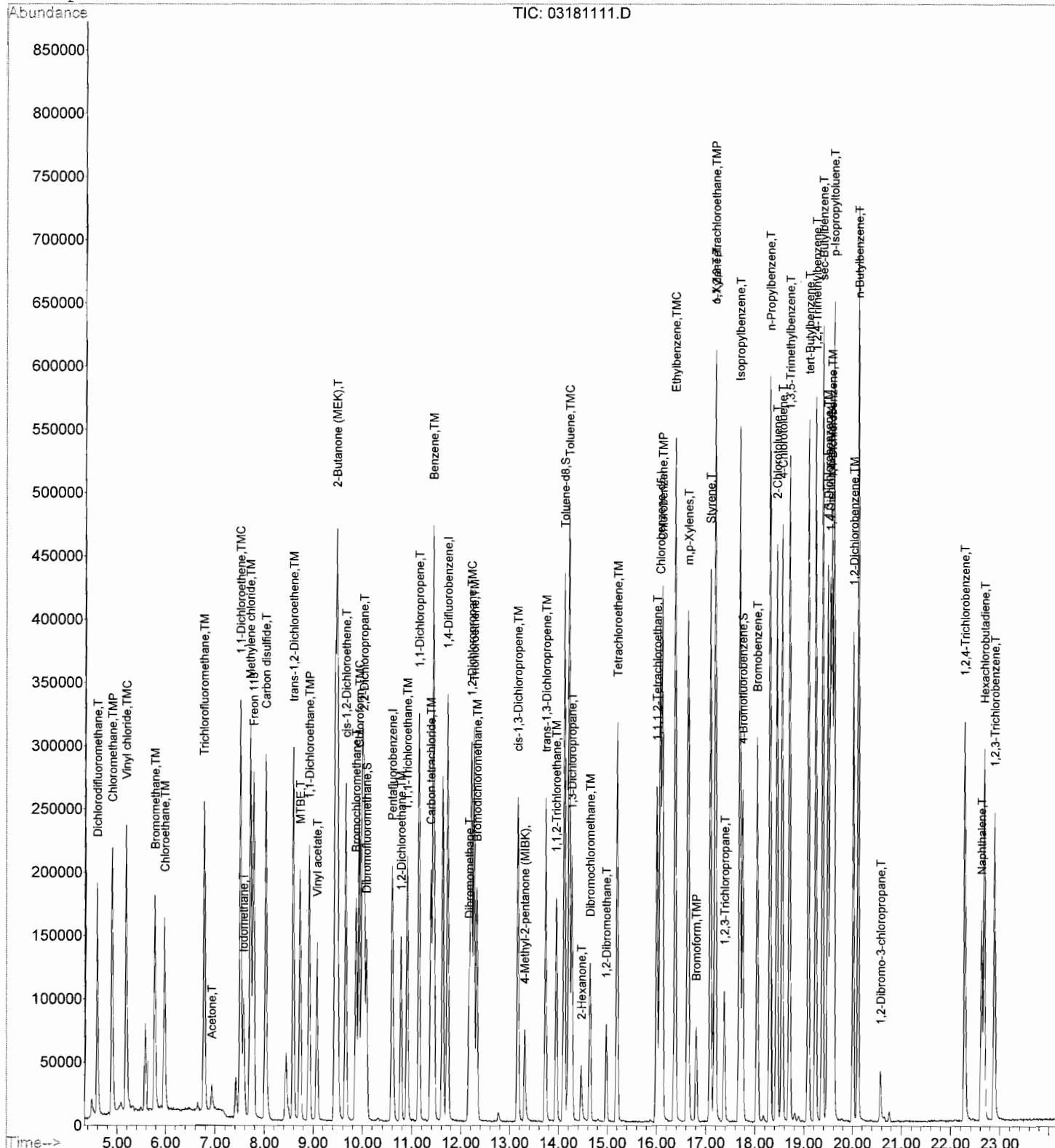
(#) = qualifier out of range (m) = manual integration

03181111.D 031711.M Fri Mar 18 13:01:09 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D Vial: 4  
Acq On : 18 Mar 2011 12:32 pm Operator: LC  
Sample : -MS1 Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 13:00 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D Vial: 5  
 Acq On : 18 Mar 2011 1:03 pm Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:29 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	179999	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	308727	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	259846	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	122755	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	98275	21.70	ug/L	0.00
Spiked Amount	25.000		Recovery	=	86.80%	
39) Toluene-d8	14.12	98	339563	21.81	ug/L	0.00
Spiked Amount	25.000		Recovery	=	87.24%	
53) 4-Bromofluorobenzene	17.75	95	123469	21.68	ug/L	0.00
Spiked Amount	25.000		Recovery	=	86.72%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	189026	22.23	ug/L	98
3) Chloromethane	4.89	50	280199	19.93	ug/L	100
4) Vinyl chloride	5.18	62	290234	23.19	ug/L	99
5) Bromomethane	5.78	94	142471	21.89	ug/L	98
6) Chloroethane	5.98	64	148632	22.40	ug/L	98
7) Trichlorofluoromethane	6.78	101	223545	25.68	ug/L	99
8) Acetone	6.93	43	28585	26.69	ug/L	100
9) Iodomethane	7.57	142	116576	28.95	ug/L	98
10) 1,1-Dichloroethene	7.51	96	108745	21.42	ug/L	98
11) Methylene chloride	7.71	84	127291	21.31	ug/L	98
12) Freon 113	7.77	101	122604	20.40	ug/L	97
13) Carbon disulfide	8.03	76	455298	25.21	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	123701	22.02	ug/L	95
15) MTBE	8.74	73	207884	21.66	ug/L	99
16) 1,1-Dichloroethane	8.92	63	251313	21.45	ug/L	99
17) Vinyl acetate	9.07	43	239938	26.36	ug/L	100
18) 2-Butanone (MEK)	9.47	72	6935	24.67	ug/L	70
19) cis-1,2-Dichloroethene	9.66	96	119845	20.60	ug/L	99
20) Bromochloromethane	9.87	128	46876	22.02	ug/L	97
21) Chloroform	9.93	83	219139	22.66	ug/L	98
22) 2,2-Dichloropropane	10.04	77	169285	21.59	ug/L	99
24) 1,2-Dichloroethane	10.78	62	129227	21.90	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	154978	22.32	ug/L	99
27) 1,1-Dichloropropene	11.14	75	178745	22.62	ug/L	99
28) Carbon tetrachloride	11.39	117	127059	23.29	ug/L	100
29) Benzene	11.44	78	457901	21.67	ug/L	98
30) Dibromomethane	12.17	93	57214	22.89	ug/L	97
31) 1,2-Dichloropropane	12.21	63	133921	22.69	ug/L	99
32) Trichloroethene	12.27	95	119509	22.62	ug/L	99
33) Bromodichloromethane	12.33	83	140177	22.60	ug/L	100
34) 2-Chlorovinylethylether	13.16	63	725	Below Cal	#	55
35) cis-1,3-Dichloropropene	13.16	75	172442	22.90	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	75831	24.59	ug/L	98
37) trans-1,3-Dichloropropene	13.73	75	138227	23.79	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	63003	22.55	ug/L	98
40) Toluene	14.21	92	266163	22.16	ug/L	98
42) 1,3-Dichloropropane	14.27	76	131001	22.28	ug/L	95

( # ) = qualifier out of range (m) = manual integration

03181112.D 031711.M Fri Mar 18 13:29:58 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D Vial: 5  
 Acq On : 18 Mar 2011 1:03 pm Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:29 2011 Quant Results File: 031711.RES

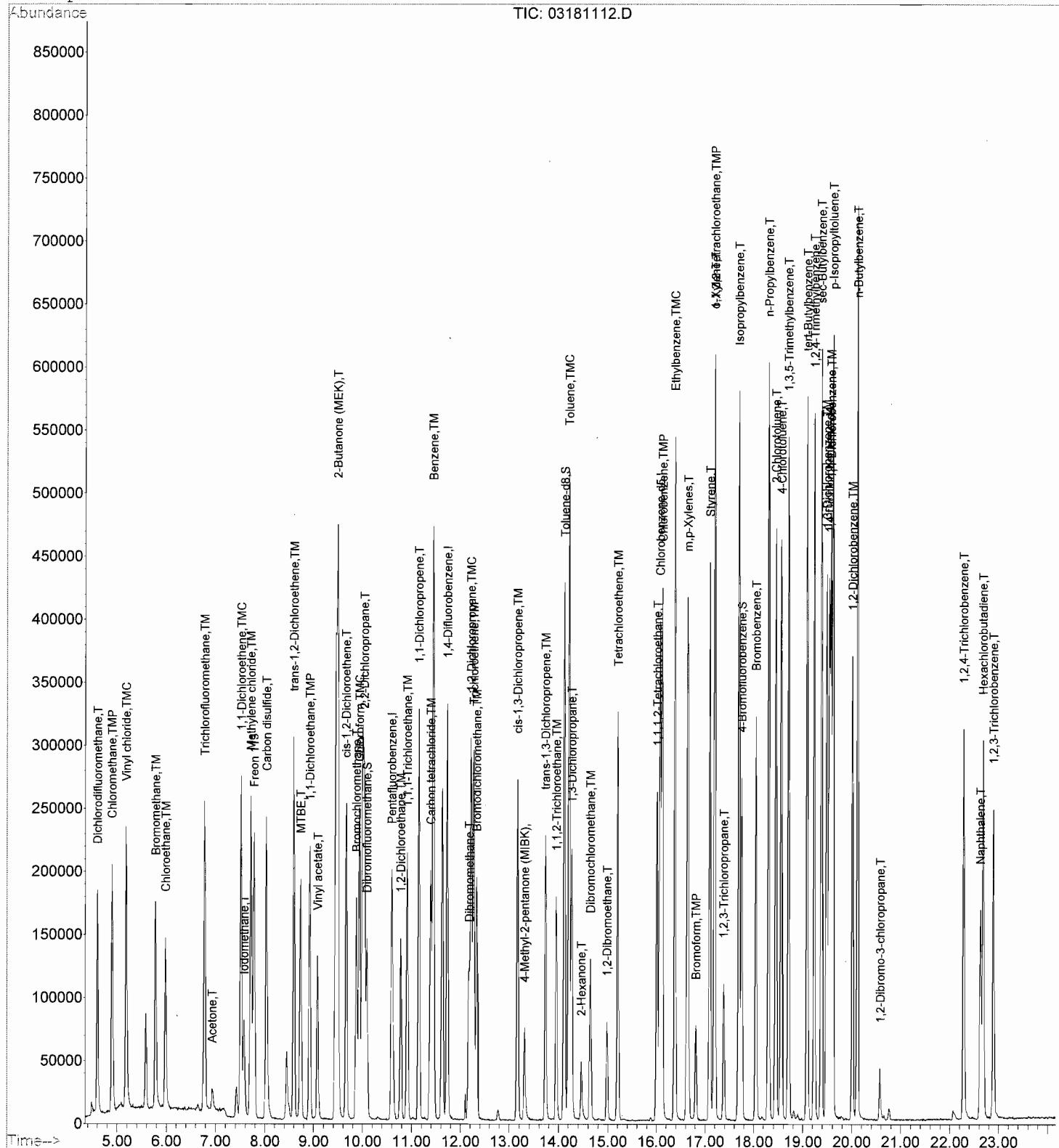
Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	49246	25.12	ug/L	# 98
44) Dibromochloromethane	14.64	129	79561	22.50	ug/L	96
45) 1,2-Dibromoethane	14.98	107	67250	22.78	ug/L	99
46) Tetrachloroethene	15.20	166	112766	24.20	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	86251	22.41	ug/L	98
48) Chlorobenzene	16.12	112	270123	22.12	ug/L	99
49) Ethylbenzene	16.37	91	506089	22.00	ug/L	100
50) m,p-Xylenes	16.63	106	177078	21.97	ug/L	100
51) Styrene	17.09	104	261153	21.37	ug/L	98
52) o-Xylene	17.19	106	168504	21.51	ug/L	100
55) Bromoform	16.81	173	42168	23.72	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	84237	23.44	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	18780	24.02	ug/L	98
58) Isopropylbenzene	17.69	105	469842	25.00	ug/L	99
59) Bromobenzene	18.05	156	99366	22.91	ug/L	97
60) n-Propylbenzene	18.30	91	628253	23.41	ug/L	99
61) 2-Chlorotoluene	18.44	91	345734	21.99	ug/L	100
62) 4-Chlorotoluene	18.55	91	355752	22.83	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	370004	22.78	ug/L	98
64) tert-Butylbenzene	19.08	119	312483	22.60	ug/L	100
65) 1,2,4-Trimethylbenzene	19.24	105	379550	23.25	ug/L	99
66) sec-Butylbenzene	19.38	105	534380	22.55	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	198554	22.47	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	199248	22.40	ug/L	99
69) p-Isopropyltoluene	19.61	119	416861	23.01	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	171131	22.27	ug/L	99
71) n-Butylbenzene	20.12	91	471564	23.39	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11516	24.04	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	123413	24.86	ug/L	100
74) Naphthalene	22.62	128	162045	24.62	ug/L	100
75) Hexachlorobutadiene	22.68	225	74980	23.65	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100253	24.77	ug/L	99

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D Vial: 5  
 Acq On : 18 Mar 2011 1:03 pm Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:29 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181122.D Vial: 16  
 Acq On : 18 Mar 2011 6:11 pm Operator: LC  
 Sample : PUC0730-01RE1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 21 6:51 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards R.T. QIon Response Conc Units Dev (Min)

1) Pentafluorobenzene	10.61	168	174868	25.00 ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	304156	25.00 ug/L	0.00
41) Chlorobenzene-d5	16.08	117	255975	25.00 ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115554	25.00 ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.10	113	96164	21.85 ug/L	0.00
Spiked Amount 25.000			Recovery =	87.40%	
39) Toluene-d8	14.12	98	334861	21.83 ug/L	0.00
Spiked Amount 25.000			Recovery =	87.32%	
53) 4-Bromofluorobenzene	17.75	95	116760	20.81 ug/L	0.00
Spiked Amount 25.000			Recovery =	83.24%	

## Target Compounds

	R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue
5) Bromomethane	5.80	94	852	0.39 ug/L	#1240T	3	
7) Trichlorofluoromethane	6.79	101	1246	0.15 ug/L		94	
8) Acetone	6.96	43	1424	Below Cal	#	48	
19) cis-1,2-Dichloroethene	9.68	96	4960	0.88 ug/L		99	
21) Chloroform	9.94	83	5077	0.54 ug/L		95	
32) Trichloroethene	12.28	95	30972	5.95 ug/L		99	
42) 1,3-Dichloropropane	14.12	76	3328	0.57 ug/L	#w2173		
46) Tetrachloroethene	15.22	166	1706	0.37 ug/L	#1240W88		

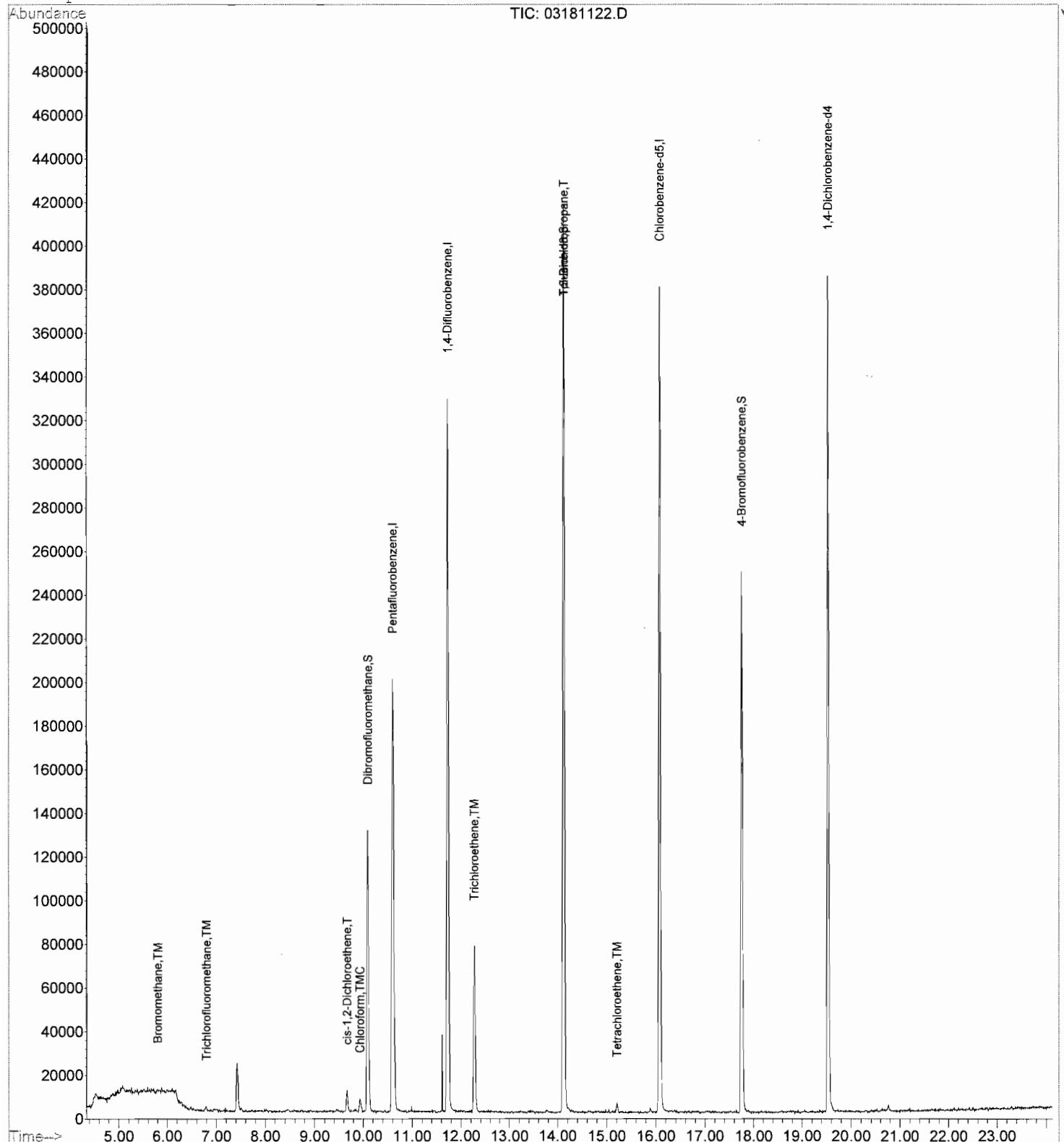
Possible Carryover in original

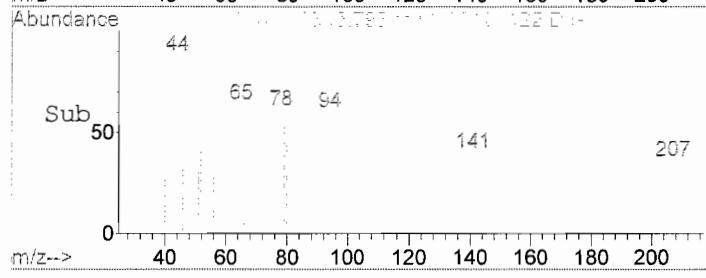
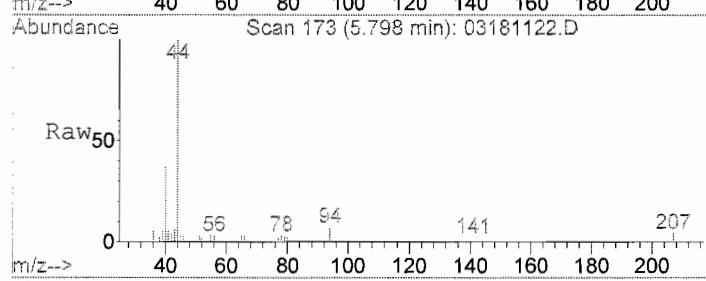
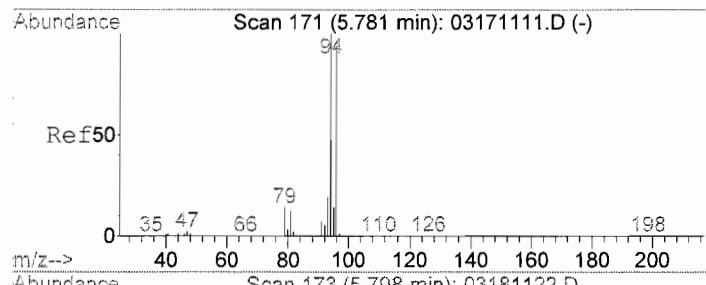
VC03/21/11

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181122.D Vial: 16  
 Acq On : 18 Mar 2011 6:11 pm Operator: LC  
 Sample : PUC0730-01RE1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 21 6:51 2011 Quant Results File: 031711.RES

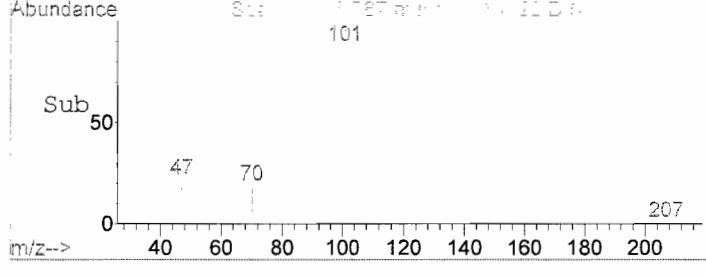
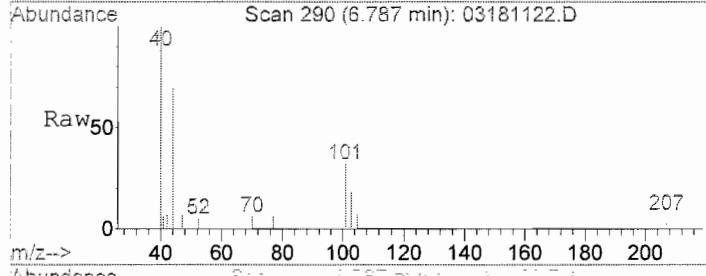
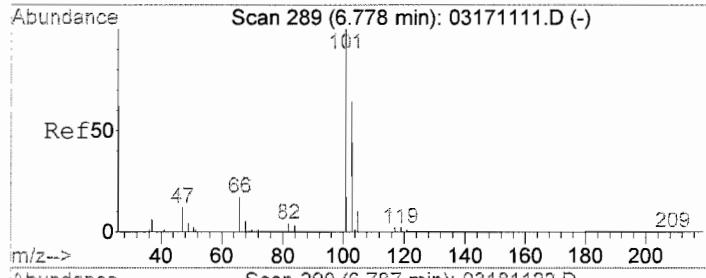
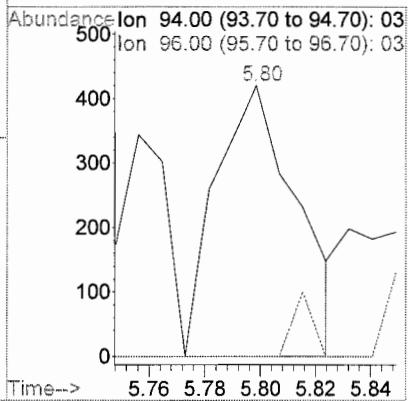
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration





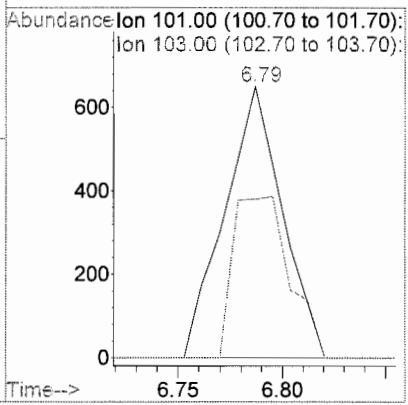
#5  
Bromomethane  
Concen: 0.39 ug/L  
RT: 5.80 min Scan# 173  
Delta R.T. 0.02 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

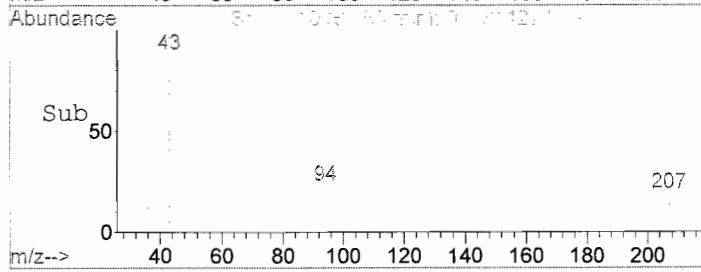
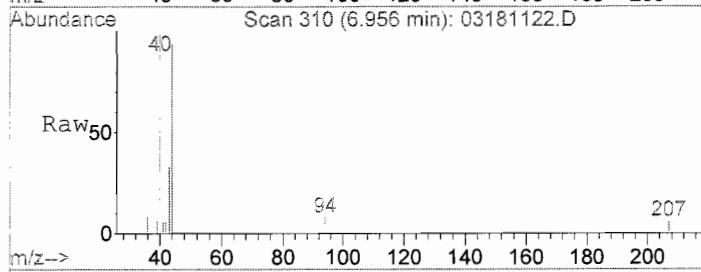
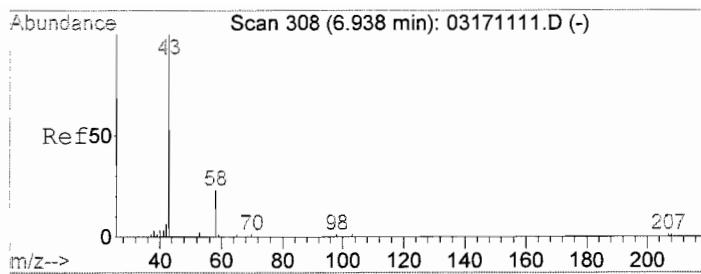
Tgt Ion: 94 Resp: 852  
Ion Ratio Lower Upper  
94 100  
96 0.0 74.0 111.0#



#7  
Trichlorofluoromethane  
Concen: 0.15 ug/L  
RT: 6.79 min Scan# 290  
Delta R.T. 0.01 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

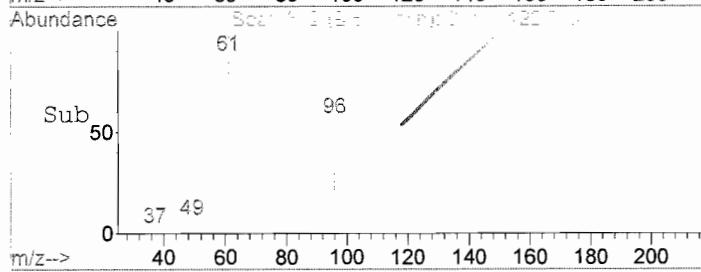
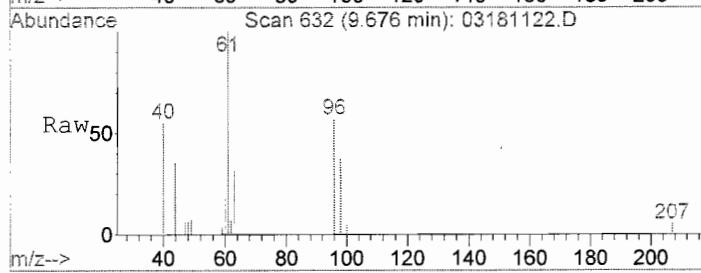
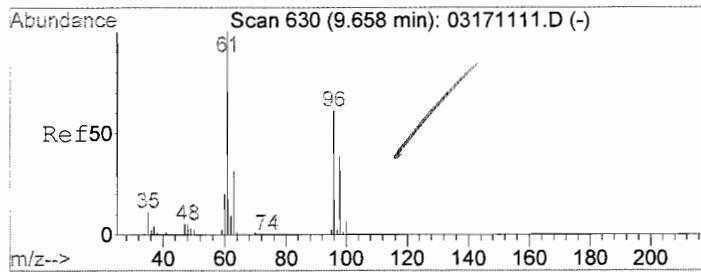
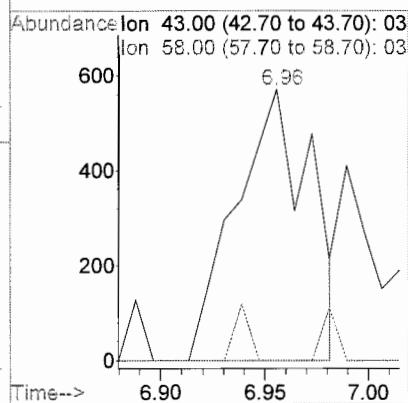
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Ion Ratio Lower Upper  
101 100  
103 58.7 50.7 76.1





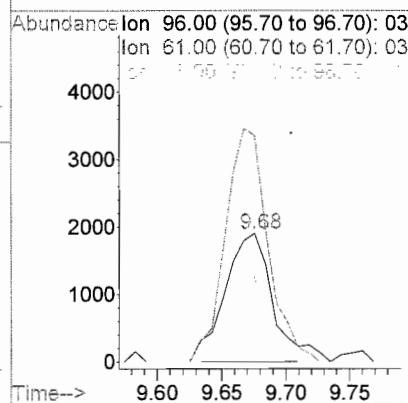
#8  
Acetone  
Concen: Below Cal  
RT: 6.96 min Scan# 310  
Delta R.T. 0.02 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

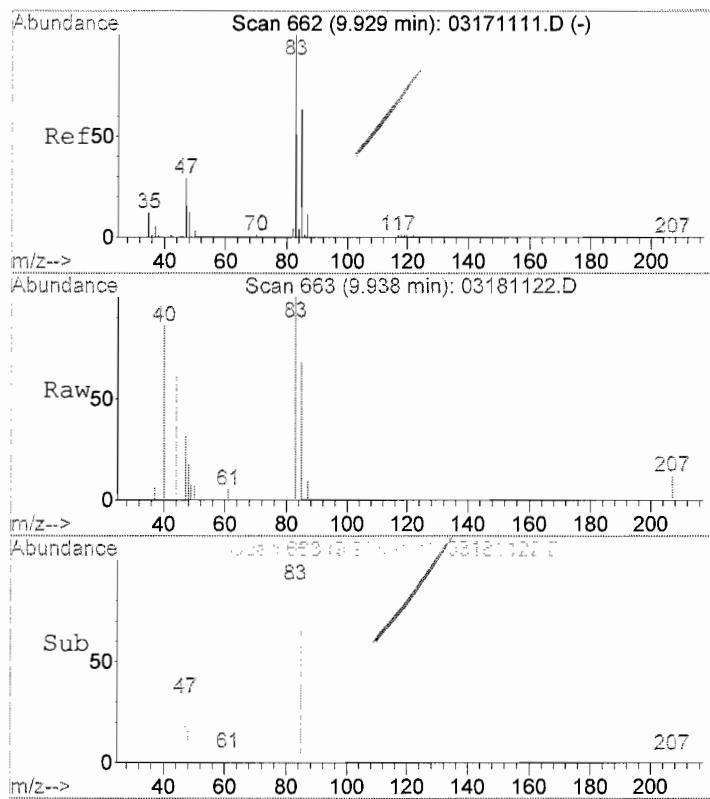
Tgt Ion: 43 Resp: 1424  
Ion Ratio Lower Upper  
43 100  
58 0.0 21.2 31.8#



#19  
cis-1,2-Dichloroethene  
Concen: 0.88 ug/L  
RT: 9.68 min Scan# 632  
Delta R.T. 0.02 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

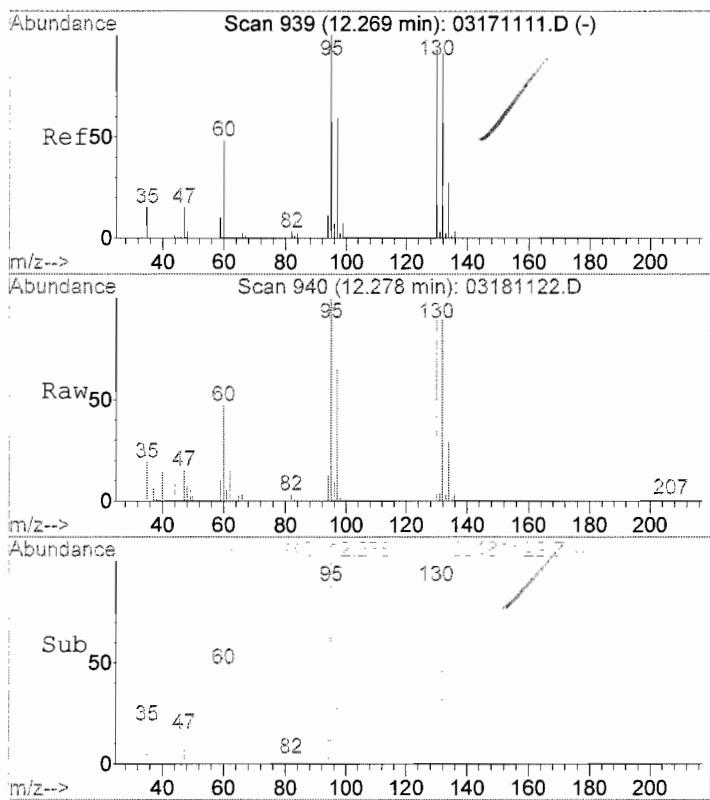
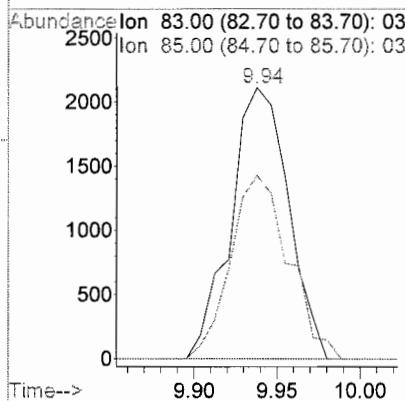
Tgt Ion: 96 Resp: 4960  
Ion Ratio Lower Upper  
96 100  
61 161.0 128.5 192.7  
98 60.4 49.9 74.9





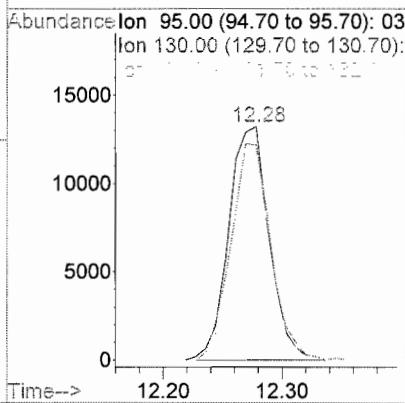
#21  
Chloroform  
Concen: 0.54 ug/L  
RT: 9.94 min Scan# 663  
Delta R.T. 0.01 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

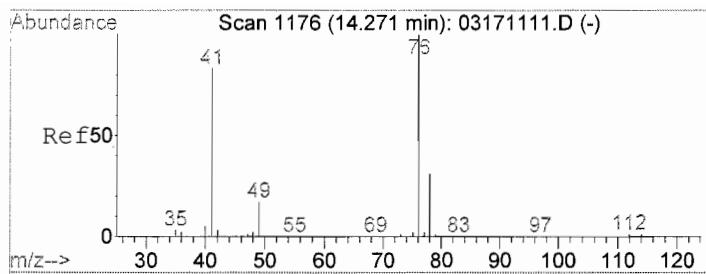
Tgt Ion: 83 Resp: 5077  
Ion Ratio Lower Upper  
83 100  
85 68.5 51.6 77.4



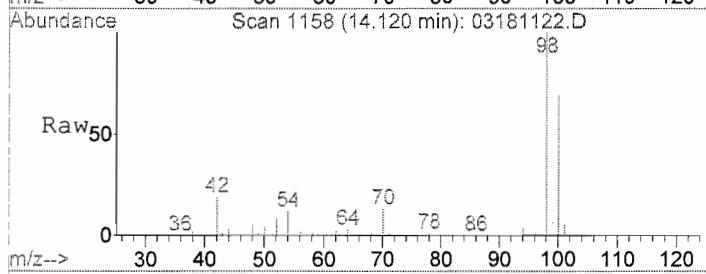
#32  
Trichloroethene  
Concen: 5.95 ug/L  
RT: 12.28 min Scan# 940  
Delta R.T. 0.01 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

Tgt Ion: 95 Resp: 30972  
Ion Ratio Lower Upper  
95 100  
130 92.1 74.2 111.4  
132 88.1 70.8 106.2



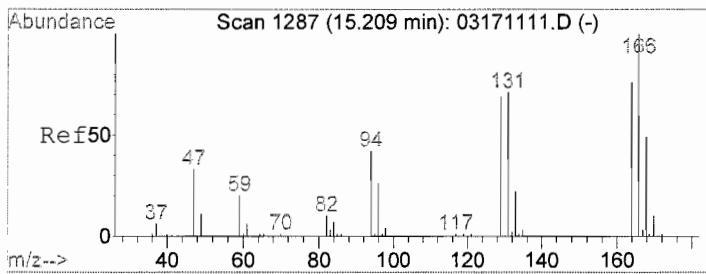
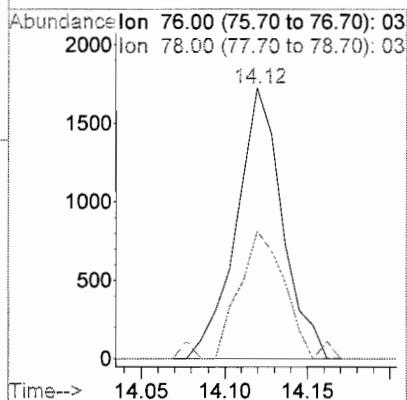
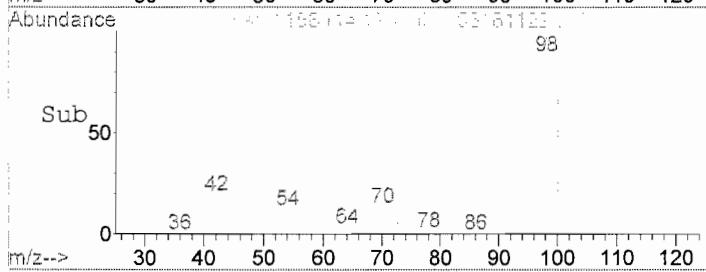


#42  
1, 3-Dichloropropane  
Concen: 0.57 ug/L  
RT: 14.12 min Scan# 1158  
Delta R.T. -0.15 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm

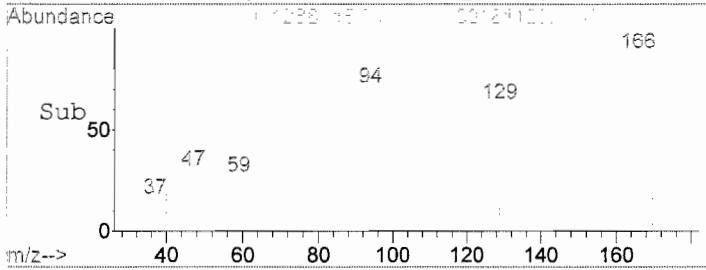
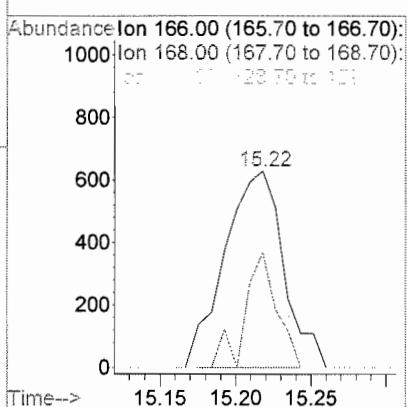
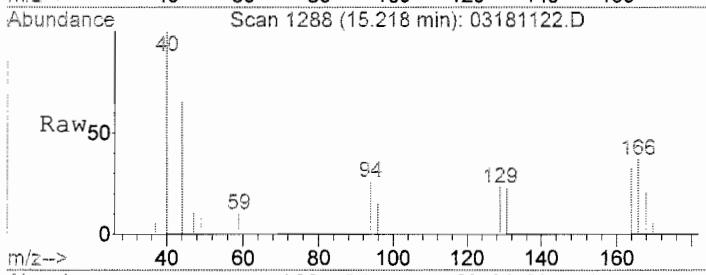


Tgt Ion: 76 Resp: 3328  
Ion Ratio Lower Upper  
76 100  
78 45.8 24.6 37.0#

*✓ RT*



#46  
Tetrachloroethene  
Concen: 0.37 ug/L  
RT: 15.22 min Scan# 1288  
Delta R.T. 0.01 min  
Lab File: 03181122.D  
Acq: 18 Mar 2011 6:11 pm





THE LEADER IN ENVIRONMENTAL TESTING

DIGESTION and/or EXTRACTION

METHOD: EPA 3520C

Work Order:

PUC0730-01

## PREPARATION BENCH SHEET

11C0526

TestAmerica Phoenix

Printed: 3/21/2011 1:01:35PM

## Matrix: Water

'repared using: N\_GC/MS Semivolatiles - N\_EPA 3520C

Surrogate used: PU01147

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
11C0526-BLK1	QC		03/14/11 17:35	1000	1							100	
11C0526-BS1	QC		03/14/11 17:35	1000	1							100	
11C0526-BSD1	QC		03/14/11 17:35	1000	1							100	
PUC0730-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0731-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0731-02	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	Level 3
PUC0731-03	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0731-04	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0827-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0827-02	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0827-03	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0827-04	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	880	1							100	
PUC0827-05	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	
PUC0829-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1							100	Level 3

## Reagents used in Batch

Reagent      Description

Solvent

Spiking Witnessed By \_\_\_\_\_ Date \_\_\_\_\_

Preparation Reviewed By \_\_\_\_\_ Date \_\_\_\_\_

Extracts Received By \_\_\_\_\_ Date \_\_\_\_\_

*C. Arias* *✓ (2 i / 1)*

TestAmerica

 Check box if the back of the previous page is used for additional noted, comments, or calculations. The use of other scratch paper is strictly prohibited.

Phoenix

Extraction Date: 3/26/11

## Liquid/Liquid Extraction Record

Test Code: 1,4-DioxaneLIMS Batch No: BNA03NIAElement No.: 1C0526Analytical Method: 3520CSolvent/Lot No. 1. DCM/1455012 Final Sol.: DCM/145501 Na<sub>2</sub>SO<sub>4</sub> Lot #:       Acid/Base/Lot No. 1.        2.        3.       Surrogate: MSD PUL0730-1 Conc. 200 ppm Volume: 100 mL Std. ID#: PV01147 Exp Date 8-24-11 S.B.Spike #1: PTI-S700 13.41 Conc. 100 ppm Volume: 200 mL Std. ID#: PTI-S700 Exp Date 10-31-11 S.G.Spike #2:        Conc.        Volume:        Std. ID#:        Exp Date       Spike #3:        Conc.        Volume:        Std. ID#:        Exp Date       Spike #4:        Conc.        Volume:        Std. ID#:        Exp Date       Start Time: 17:35 End Time: 1745 Spiked By: RA Spike Witness: JGK-D'd by:        E-vap'd by: JG Solvent Ex'd by: NA Brought to V<sub>f</sub> & Vialled by:       

	Sample #	RE	Sample Frac.	pH <sup>1</sup>	Initial Vol/Wt (mLs/g)	Final Vol. (mLs)	K-D'd (✓)	Evp'd (✓)	Clean Up <sup>2</sup>	Color	Sample linked at:
1	MB	NA	WA	S	1L	1	✓	✓	NA	clear	NA
2	LCS		1	S	1L	1	✓	✓		clear	
3	LCSD		1	S	1L	1	✓	✓		clear	
4	MS PUL0730-1		D	7	1L	1	✓	✓		clear	
5	MSD PUL0731-1		D	7	1L	1	✓	✓		clear	
6	RLV PUL0731-2		D	7	1L	1	✓	✓		blue clear	
7	PUL0731-3		D	7	1L	1	✓	✓		clear	
8	PUL0731-4		D	7	1L	1	✓	✓		clear	
9	PUL0827-1		D	7	1L	1	✓	✓		clear	
10	PUL0827-2		D	7	1L	1	✓	✓		clear	
11	PUL0827-3		D	7	1L	1	✓	✓		clear	
12	PUL0827-4		D	7	883mL	1	✓	✓		clear	
13	PUL0827-5		D	7	1L	1	✓	✓		clear	
14	PUL0829-1	+	D	7	1L	1	✓	✓		clear	
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

<sup>1</sup> Sample pH / Adjusted pH;<sup>2</sup> AW is Acid Wash, DW is DCM wash.

a = Acid Fraction, b = base/neutral fraction

 Insufficient Sample for MS/MSD     MS/MSD Designated     MS/MSD Chosen     Sample Container(s) Shaken & Rinsed with SolventSample Extracts located in: Box# \_\_\_\_\_ Row(s) & Numbers \_\_\_\_\_ BNA Freezer  SVOA's Fridge \_\_\_\_\_

Comments: live 6 x 10ml immiscible blue : a 3 - 16-11

Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

### METHOD

MODIFIED EPA 8270C

DATE: 01/05/11

Work Order: PUC0730-01

Attachment 1

INITIAL CALIBRATION CURVE CHECKLIST

Department: Semivola	Method: Mod 8270C	Instrument #: CCRS14
Analyst: C-Laurie	Analysis Date: 01-05-11	
Method name saved in the file: DIVAPANE\010511.M		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 <input checked="" type="radio"/> Y <input type="radio"/> N		
2. Did the calibration curve pass the method criteria? <input checked="" type="radio"/> Y <input type="radio"/> N		
3. Were any points of the curve removed or replaced? If yes, what points were removed or replaced: lowest      middle      highest Why?		
4. Were any individual analyte points removed? If yes, what points were removed or replaced: lowest      middle      highest List of the analytes:		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input checked="" type="checkbox"/> Average Response Factor		
<input type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: <input checked="" type="radio"/> Y <input type="radio"/> N		

Review Signatures:	Analyst:	Date:
	C-Laurie	1-05-11
Reviewer:	Jessica Breitbach	Date: 01/05/11

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: <u>Semivac</u>	Method: <u>MDL 8270C</u>	Instrument #: <u>GCMS14</u>
Analyst: <u>C. Fair</u>	Analysis Date: <u>2/27/11 01/05/11</u> <u>3/01/11</u>	
Method name saved in the file: <u>DIPANE \ 010511.D.W</u>		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		
2. Did the calibration curve pass the method criteria? Y N		
3. Were any points of the curve removed or replaced? Y N		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? Y N		
If yes, what points were removed or replaced: lowest middle highest		
List of the analytes:		
<i>update due to RT shift</i>		
5. Circle the calibration model used (you may circle one or more)		
<input type="checkbox"/> Average Response Factor		
<input type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: Y N		

Review Signatures:	Analyst:	Date:
	<u>C. Fair</u>	<u>3/01/2011</u>
Reviewer:	Jesse Bruehew	Date: <u>3/01/11</u>



Department: Semi-Volatiles

Page 21 of 22

SOP

Number/Revision

05-020.03

Date issued:

March 2007

Expiration Date:

March 2008

NOT TO BE PHOTOCOPIED

EPA 8270C Modified 1,4-Dioxane by Isotope Dilution, Extraction & GC/MS Analysis  
Data Review Checklist (Example)ANALYSIS DATE: 6/10/05

MEETS CRITERIA?

1. DFTPP (50ng) VERIFY MEETS CRITERIA EVERY 12 HOURS DIXANE\  Y/N
2. INITIAL CALIBRATION CURVE (MIN. 5 LEVELS) DATE: 010511.m  Y/N
  - SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05  Y/N
  - CCC 1,4-DICHLOROBENZENE < 30% RSD, 1,4-DIOXANE  $\leq$  20% RSD  Y/N
  - ALL OTHER COMPOUNDS < 15% RSD OR USE CURVE ( $r^2 > 0.990$ )  Y/N
3. INITIAL CALIBRATION VERIFICATION (SEC. SOURCE) ANALYZED  Y/N
4. CONTINUING CALIBRATION CHECK (EVERY 12 HOURS)
  - SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05  Y/N
  - CCC 1,4-DICHLOROBENZENE < 20% D; 1,4-DIOXANE  $\leq$  20%  Y/N
  - IS 1,4-DCB-d4 AREA -50% TO -100% TO MID-POINT IN I. CAL  Y/N
  - IS 1,4-DCB-d4 RT  $\pm$  30 SEC. TO MID-POINT IN INITIAL CALIB.  Y/N
  - TAILING FACTOR B/N BENZIDENE. 3.0  Y/N
5. METHOD BLANK
  - ANALYZE ONE PER BATCH (< 20 SAMPLES)  Y/N
  - 1,4-DIOXANE MUST BE < REPORTING LIMIT  Y/N
6. LOS/LCSD WITHIN LIMITS
  - MUST BE ANALYZED PER 20 SAMPLES/BATCH  Y/N
  - % RECOVERY WITHIN 80 - 120% LIMITS  Y/N
  - RPD WITHIN LIMITS ( $\leq$  25 RPD)  Y/N

Continued on next page



Department: Semi-Volatiles

Page 21 of 22

SOP:

Number/Revision:  
05-C20.03

TITLE:

EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS AnalysisDate issued:  
March 2007Expiration Date:  
March 2009

NOT TO BE PHOTOCOPIED

## 7. MS/MSD

- MUST BE ANALYZED PER 20 SAMPLES/BATCH Y/N
- % RECOVERY WITHIN 70-130% LIMITS Y/N
- RPD WITHIN LIMITS ( $\leq$  25 RPD) Y/N

## 8. SAMPLES

- EXTRACTED WITHIN 7 DAYS OF SAMPLING Y/N
- ANALYZED WITHIN 40 DAYS OF EXTRACTION Y/N
- IS 1,4-DCB-d4 RT  $\pm$  30 SECs AND IS AREA  $\pm$ 50% TO  $\pm$ 100% TO CONT. CAL Y/N
- SURROGATE RECOVERIES WITHIN LIMITS Y/N

## 9. TUNE INJECTED WITHIN 12hr TIME PERIOD

Y/N

## COMMENTS

#ANALYST:

a

DATE:

1-5-11

REVIEWER:

DATE:

## Response Factor Report GCMS14

Method Path : D:\Ymsdchem\Y\GCMS14\METHODS\14DIOXANE  
 Method File : 010511.M  
 Title : GCMS14 / MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1) I 1, 4-Dioxane-d8										ISTD	
2) C 1, 4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018	4.12
3) I 1, 4-Dichlorobenzene										ISTD	
4) C* 1, 4-Dichlorobenzene	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644	4.43
5) P N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195	5.28
6) S Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792	4.99

(#) = Out of Range

C 1.5-11

1/5/11

## Response Factor Report GCMS14

Method Path : D:\\$msdchem\\$\\$GCMS14\\$METHODS\\$14DIOXANE\\$  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

*update run shift  
on 2-25-11*

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
----------	---	---	---	---	---	---	---	---	---	-----	------

1) I	1,4-Dioxane-d8									STD	
2) C	1,4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018
3) I	1,4-Dichlorobenzene									STD	
4) C*	1,4-Dichlorobene...	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644
5) P	N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195
6) S	Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792

(#) = Out of Range

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M /  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D ✓
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D ✓
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D ✓
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D ✓
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D ✓
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D ✓
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D ✓
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D ✓
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D ✓
10	CC	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D -

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	1/05/11
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011	
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011	
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011	
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011	
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011	
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011	
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011	
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011	
10	CC	Jan 05 13:29 2011	Jan 05 12:20 2011	

010511.M Wed Jan 05 13:33:03 2011

Agilent

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D
10	CC	10	20	R:\022511\02251108.D ✓ used to update due to pt shift

#	ID	Update Time	Quant Time	Acquisition Time	Comments
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	1/05/2011	✓
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011		✓
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011		
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011		
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011		
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011		
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011		
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011		
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011		
10	CC	Feb 28 10:27 2011	Feb 28 10:27 2011	25 Feb 2011	6:23 pm ✓

010511.D.M Mon Feb 28 10:59:27 2011

3/2011

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\

Method File : 010511.M

Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

Last Update : Wed Jan 05 13:29:49 2011

Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.975	1.000	A	1	A	B
2 C	1,4-Dioxane	88	3.028	1.018	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.092	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.104	1.002	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.422	1.054	A	1	A	B
6 S	Nitrobenzene-d5	82	6.557	1.076	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. &amp; Q Q = Qvalue L = Largest A = All

010511.M Wed Jan 05 13:33:14 2011

✓

L  
1/6/11

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12

Misc Info 1,4-DIOXANE

Instrument Name	GCMS14	10ug/mL PU00063 01051110.D D:\msdchem\1\GCMS14\DATA\010511\ DIOX010511.m			PASS/FAIL
	CCV Response	ICAL Response	0.5X	2X	
Internal Standard 1,4-Dichlorobenzene-d4	243008	243008	121504	486016	<b>PASS</b>
Internal Standard 1,4-Dichlorobenzene-d4	RT 6.09	RT 6.09	-0.5min 5.59	+0.5min 6.59	<b>PASS</b>

update  
01-5-11

AS

1/5/2011 1:42 PM

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12  
 Misc Info 1,4-DIOXANE  
 Instrument Name GCMS14

10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 mid-RT

NAME	RT	CCV RRT	010511.M	AGREE	AGREE	PASS/FAIL
		Value		-0.06	0.06	
		(Target/IS)				

IS	1,4-Dioxane-d8	2.975 ✓	1.0178 ✓	1.0178 ~	0.9578 ✓	1.0778 <-PASS
	1,4-Dioxane	3.028 ✓				
IS	1,4-Dichlorobenzene-d4	6.092 ✓	1.0019 ✓	1.0019 ~	0.9419 ✓	1.0619 <-PASS
	1,4-Dichlorobenzene	6.104 ✓				
	N-Nitrosodi-n-propylamine	6.422 ✓	1.0541 ✓	1.0541 ~	0.9941 ✓	1.1141 <-PASS
	Nitrobenzene-d5	6.557 ✓	1.0763 ✓	1.0763 ~	1.0163 ✓	1.1363 <-PASS

Update only.  
 Added in Revised  
 Review checklist for  
 1,4-Dioxane

0-3-09-11.

BBH

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\msdchem\1\GCMS14\sequence\010511.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\010511\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method

(X) Inject Anyway

( ) Reprocessing Only

( ) Don't Inject

Line	Sample	Sample Name/Misc Info
1)	Sample	1 01051101 DB5MS14 DCM
2)	Sample	2 01051102 DB5MS14 DCM
3)	Sample	3 01051103 DB5MS14 25ng tune pu00017 <i>✓</i>
4)	Sample	4 01051104 DB5MS14 ✓25ng TUNE PU00017 <i>v-5-11</i>
5)	Sample	5 01051105 DIOXANE BLANK
6)	Sample	6 01051106 DIOXANE 0.5ug/mL PU00059
7)	Sample	7 01051107 DIOXANE 1.0ug/mL PU00060
8)	Sample	8 01051108 DIOXANE 2.0ug/mL PU00061
9)	Sample	9 01051109 DIOXANE 4.0ug/mL PU00062
10)	Sample	10 01051110 DIOXANE 10ug/mL PU00063
11)	Sample	11 01051111 DIOXANE 20ug/mL PU00064
12)	Sample	12 01051112 DIOXANE 30ug/mL PU00065
13)	Sample	13 01051113 DIOXANE 40ug/mL PU00066
14)	Sample	14 01051114 DIOXANE 100ug/mL PU0067
15)	Sample	15 01051115 DIOXANE QCS10ug/mL PU00068 <i>v-5-11</i>
16)	Sample	1 01051116 DIOXANE 10ug/mL PU00063ccv PCM
17)	Sample	2 01051117 DIOXANE 10ug/mL PU00063ccv
18)	Sample	3 01051118 DIOXANE 11A0067-BLK1
19)	Sample	4 01051119 DIOXANE PTL1256-03RE1
20)	Sample	5 01051120 DIOXANE PTL1256-04RE1
21)	Sample	6 01051121 DIOXANE PTL1256-06RE1
22)	Sample	7 01051122 DIOXANE PTL1256-07RE1
23)	Sample	8 01051123 DIOXANE PTL1262-01RE1
24)	Sample	9 01051124 DIOXANE PTL1262-02RE1
25)	Sample	10 01051125 DIOXANE PTL1256-10
26)	Sample	11 01051126 DIOXANE PTL1262-01
27)	Sample	12 01051127 DIOXANE PTL1262-02

Sequence Reviewed By: a Date: 1-6-11

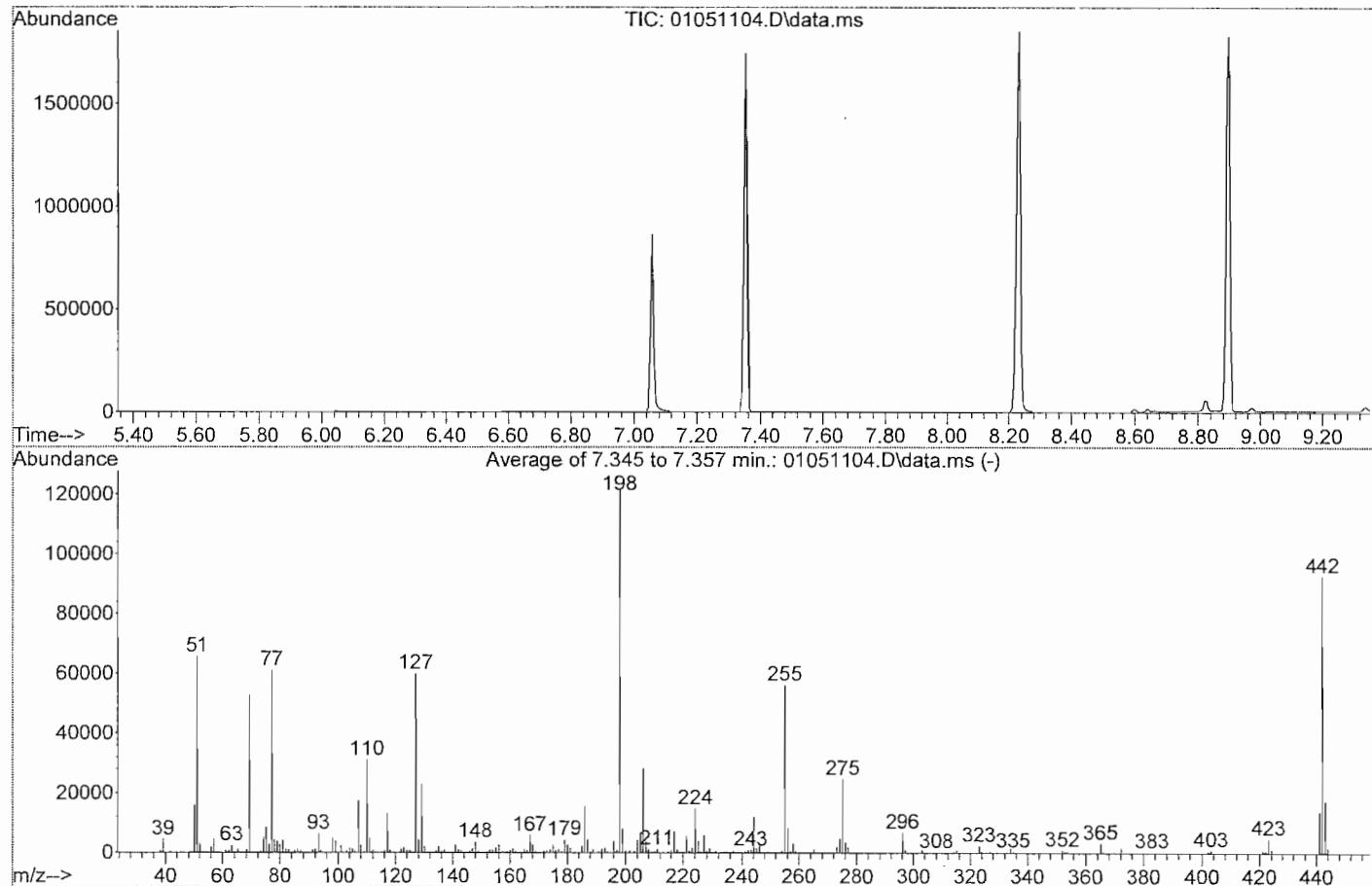
Date Analyzed: 1-6-11 Analyst: a Date Run: 1-5-11

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Fri Sep 10 17:23:33 2010



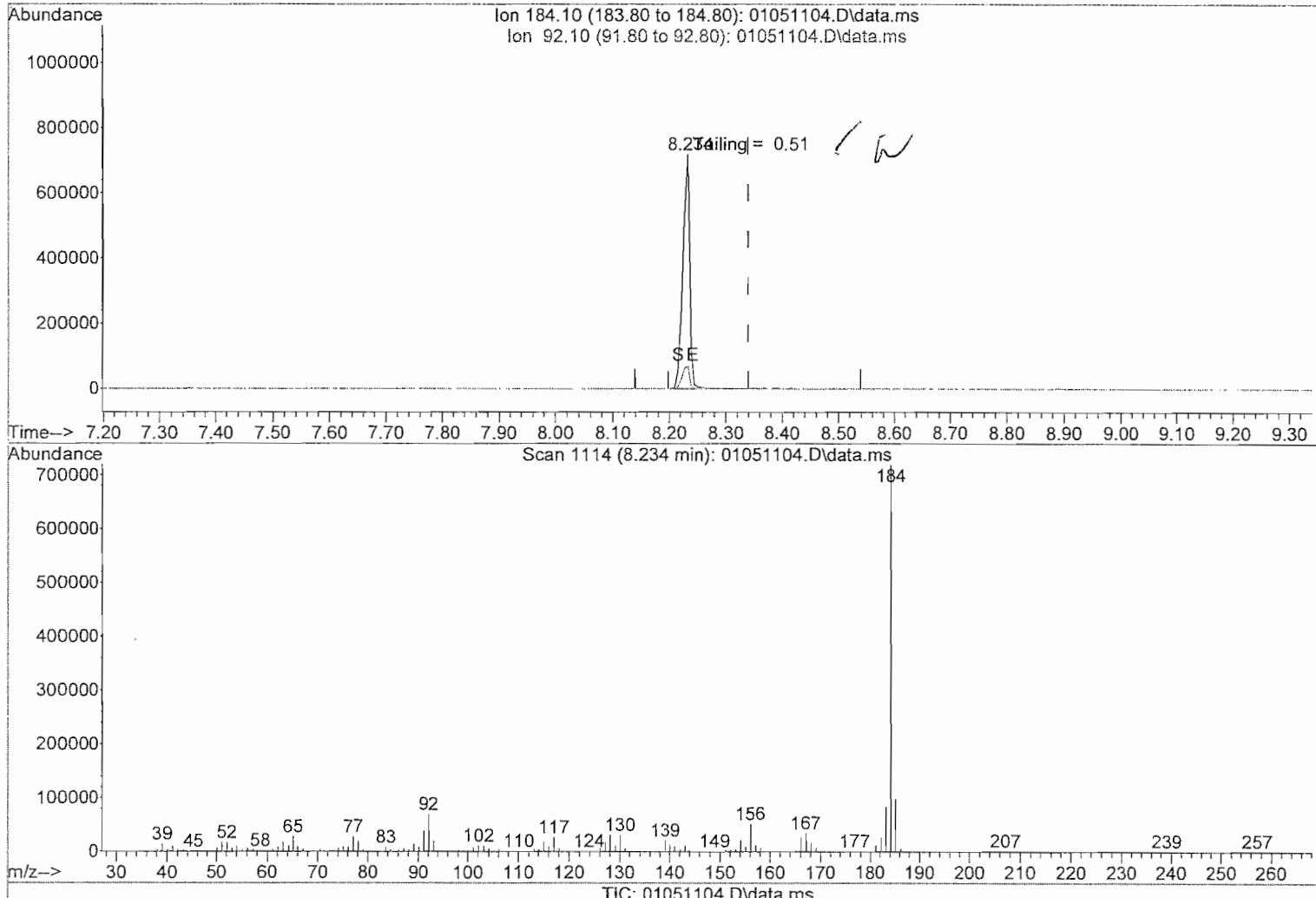
AutoFind: Scans 963, 964, 965; Background Corrected with Scan 958

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	65567	PASS
68	69	0.00	2	1.8	948	PASS
69	198	0.00	100	43.2	52531	PASS
70	69	0.00	2	0.4	221	PASS
127	198	40	60	49.2	59789	PASS
197	198	0.00	1	0.7	889	PASS
198	198	100	100	100.0	121514	PASS
199	198	5	9	6.5	7948	PASS
275	198	10	30	20.3	24613	PASS
365	198	1	100	2.6	3102	PASS
441	443	0.01	100	78.5	13579	PASS
442	198	40	100	76.1	92525	PASS
443	442	17	23	18.7	17299	PASS

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 11:46:05 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 QLast Update : Fri Sep 10 17:23:33 2010  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.234min (-0.106) 7.68

response 603050

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.42
0.00	0.00	0.00
0.00	0.00	0.00

A

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051105.D  
 Acq On : 5 Jan 2011 10:44 am  
 Operator : CL  
 Sample : BLANK  
 Misc : 1,4-DIOXANE  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 13:29:49 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 969	96	300515	20. 00	ug/mL	0. 00
3) 1, 4-Dichlorobenzene-d4	6. 092	152	231052	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	0. 000	82	0	0. 00	ug/mL	
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 999	88	49	0. 00	ug/mL#	1
4) 1, 4-Dichlorobenzene	6. 092	146	306	0. 01	ug/mL#	1

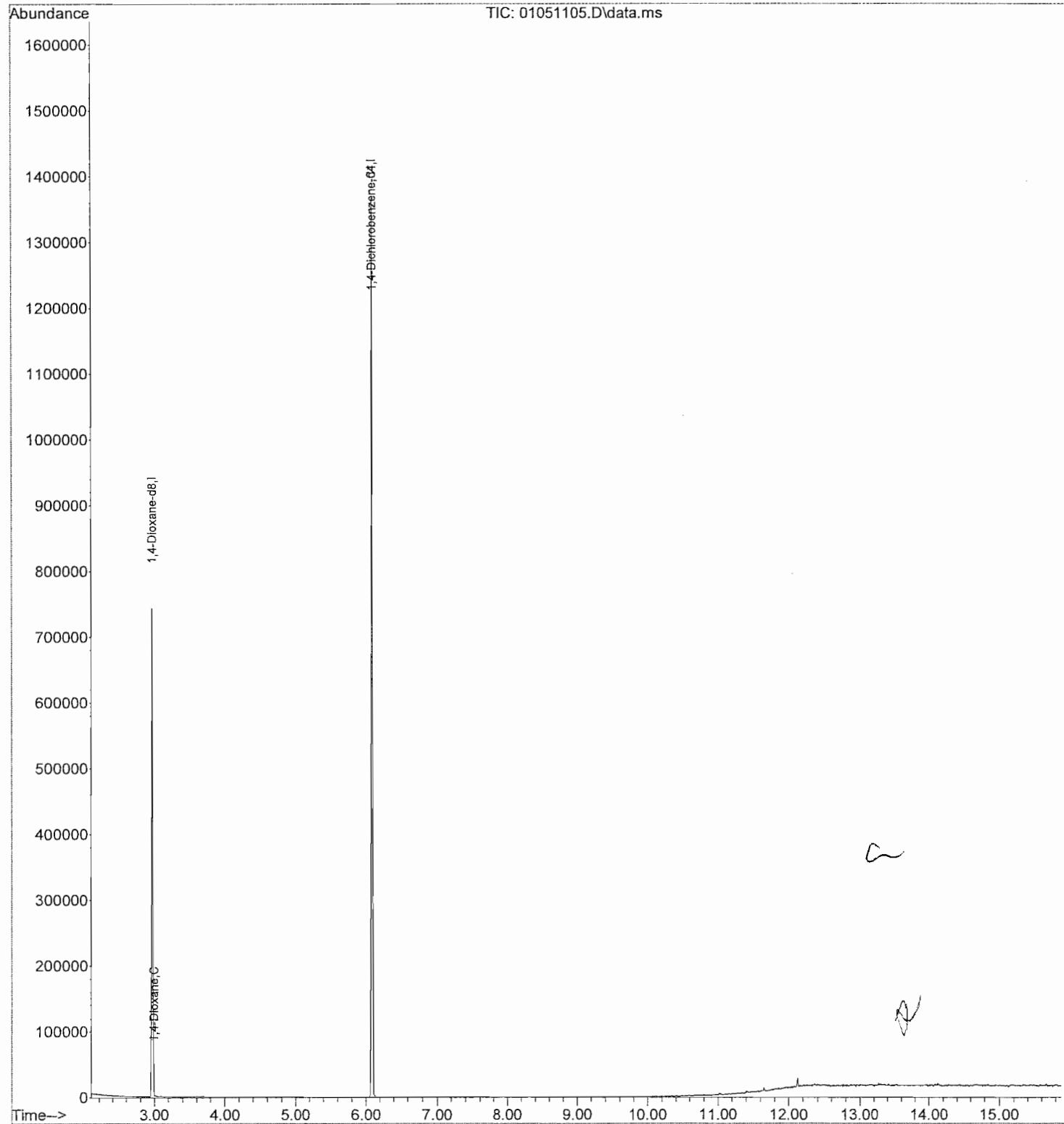
(#) = qualifier out of range (m) = manual integration (+) = signals summed

01.5.11

01.5.11

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\  
Data File : 01051105.D  
Acq On : 5 Jan 2011 10:44 am  
Operator : CL  
Sample : BLANK  
Misc : 1,4-DIOXANE  
ALS Vial : 5 Sample Multiplier: 1

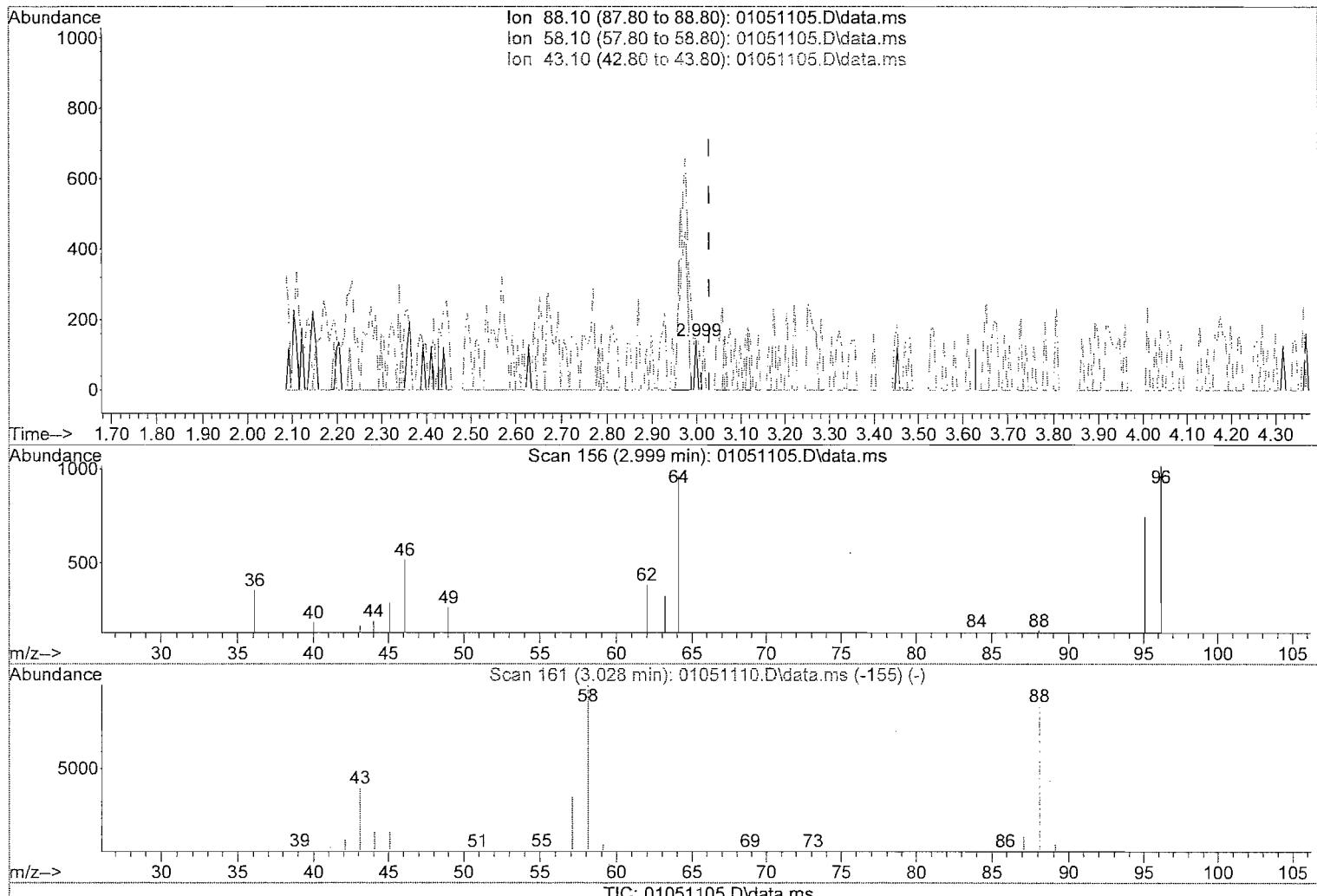
Quant Time: Jan 05 13:45:56 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 13:29:49 2011  
Response via : Initial Calibration



## Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051105.D  
 Acq On : 5 Jan 2011 10:44 am  
 Operator : CL  
 Sample : BLANK  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 13:29:49 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.999min (-0.029) 0.00ug/mL

response 49

Ion	Exp%	Act%
88.10	100	100
58.10	97.60	1263.27#
43.10	39.30	2171.43#
0.00	0.00	0.00

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1,4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

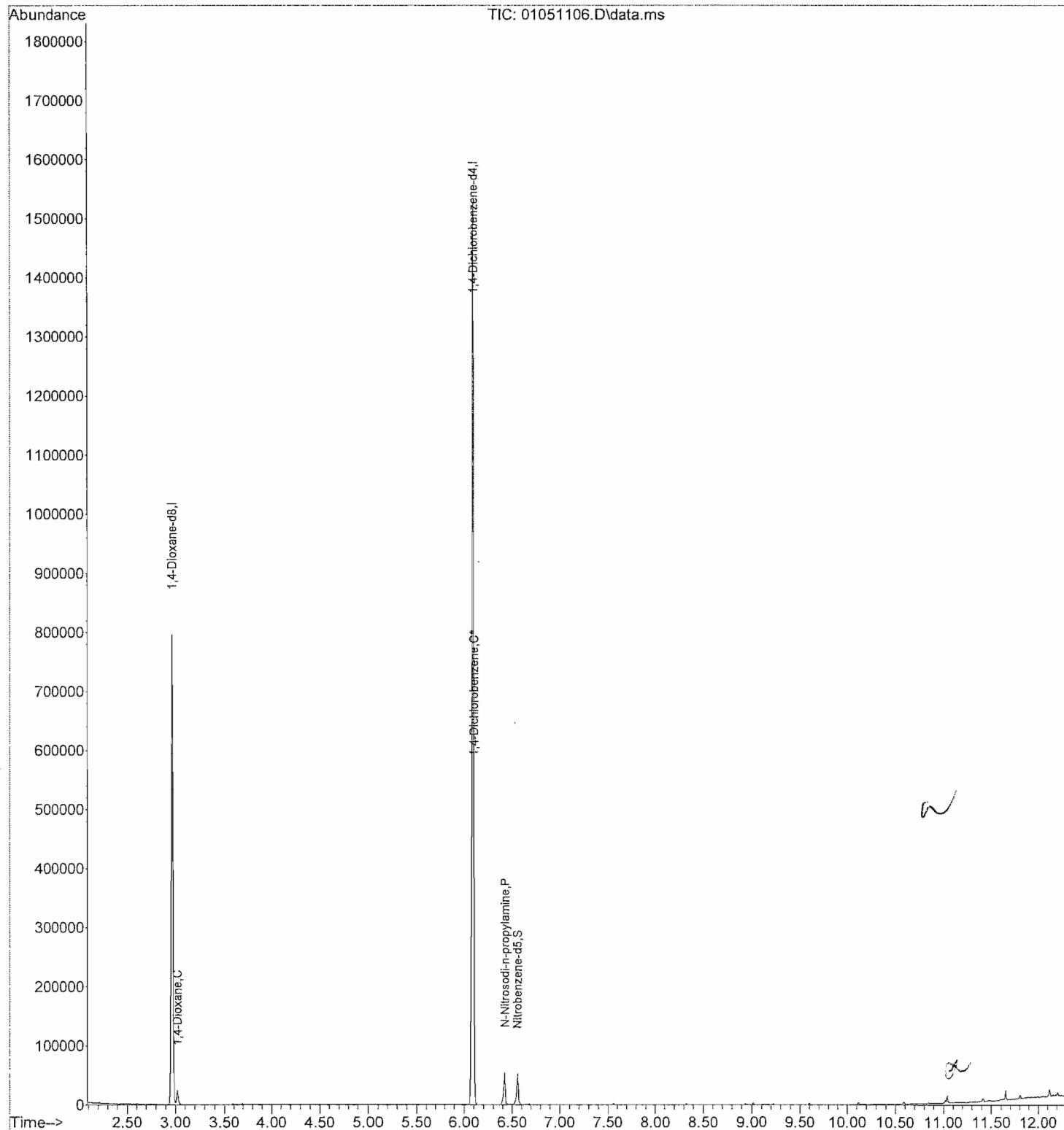
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.963	96	/ 318261	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	240601	10.00	ug/mL	0.00
<b>System Monitoring Compounds</b>						
6) Nitrobenzene-d5	6.557	82	20080	0.62	ug/mL	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	3.016	88	7745	/ 0.48	ug/mL	96
4) 1,4-Dichlorobenzene	6.104	146	19858	0.51	ug/mL	87
5) N-Nitrosodi-n-propylamine	6.422	70	12932	0.61	ug/mL	98

(#= qualifier out of range (m)= manual integration (+)= signals summed

AFCN

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\  
Data File : 01051106.D  
Acq On : 5 Jan 2011 11:10 am  
Operator : CL  
Sample : 0.5ug/mL PU00059  
Misc : 1, 4-DIOXANE  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051107.D

Acq On : 5 Jan 2011 11:32 am

Operator : CL

Sample : 1.0ug/mL PU00060

Misc : 1,4-DIOXANE

ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.969	96	✓ 283387	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	213017	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	36439	1.28	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.022	88	14877	1.04	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	35480	1.03	ug/mL	95
5) N-Nitrosodi-n-propylamine	6.422	70	23862	1.28	ug/mL	96

(##) = qualifier out of range (m) = manual integration (+) = signals summed

M. 15. 11

ABF

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051107.D

Acq On : 5 Jan 2011 11:32 am

Operator : CL

Sample : 1.0ug/mL PU00060

Misc : 1, 4-DIOXANE

ALS Vial : 7 Sample Multiplier: 1

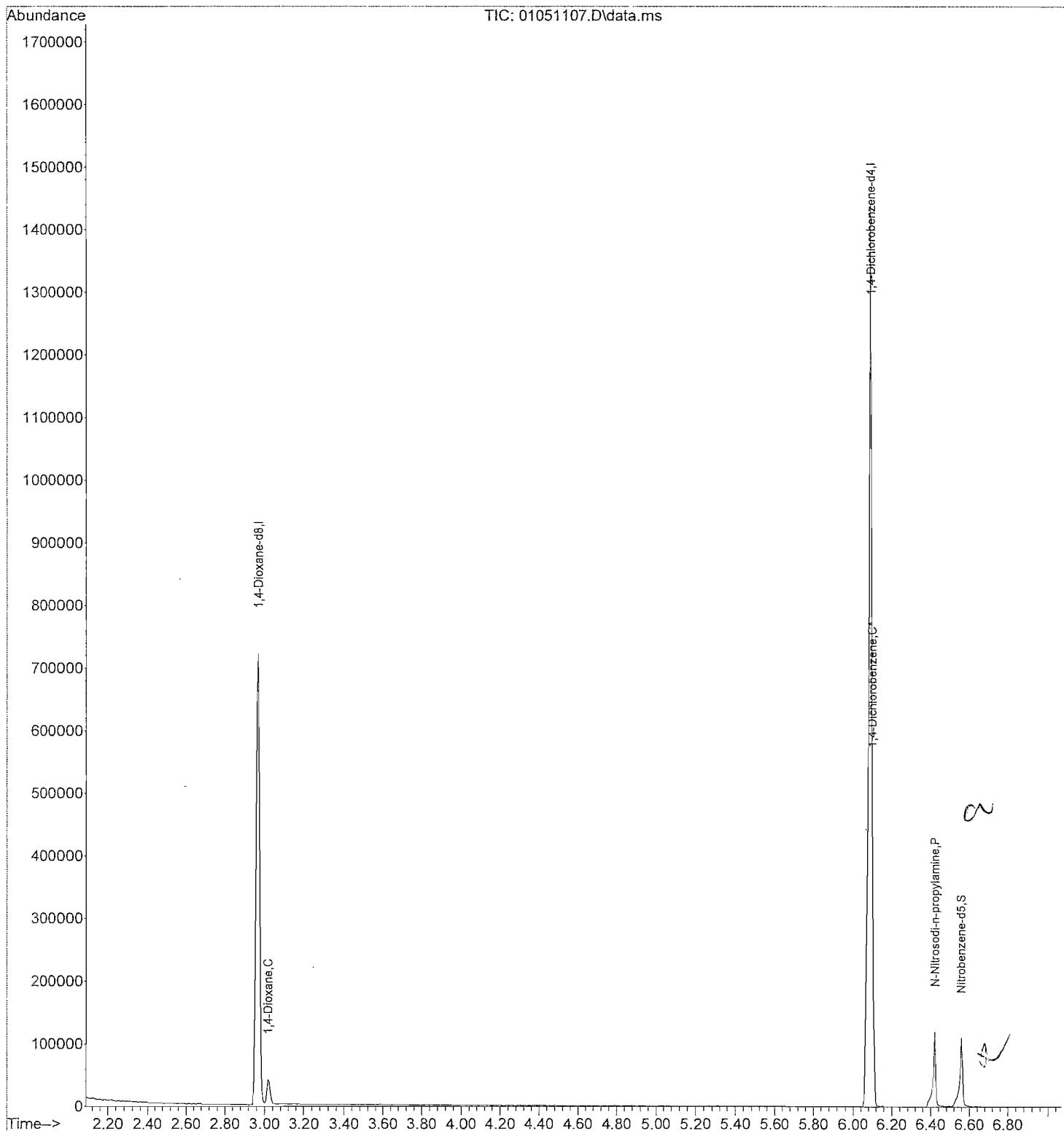
Quant Time: Jan 05 11:44:38 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1,4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

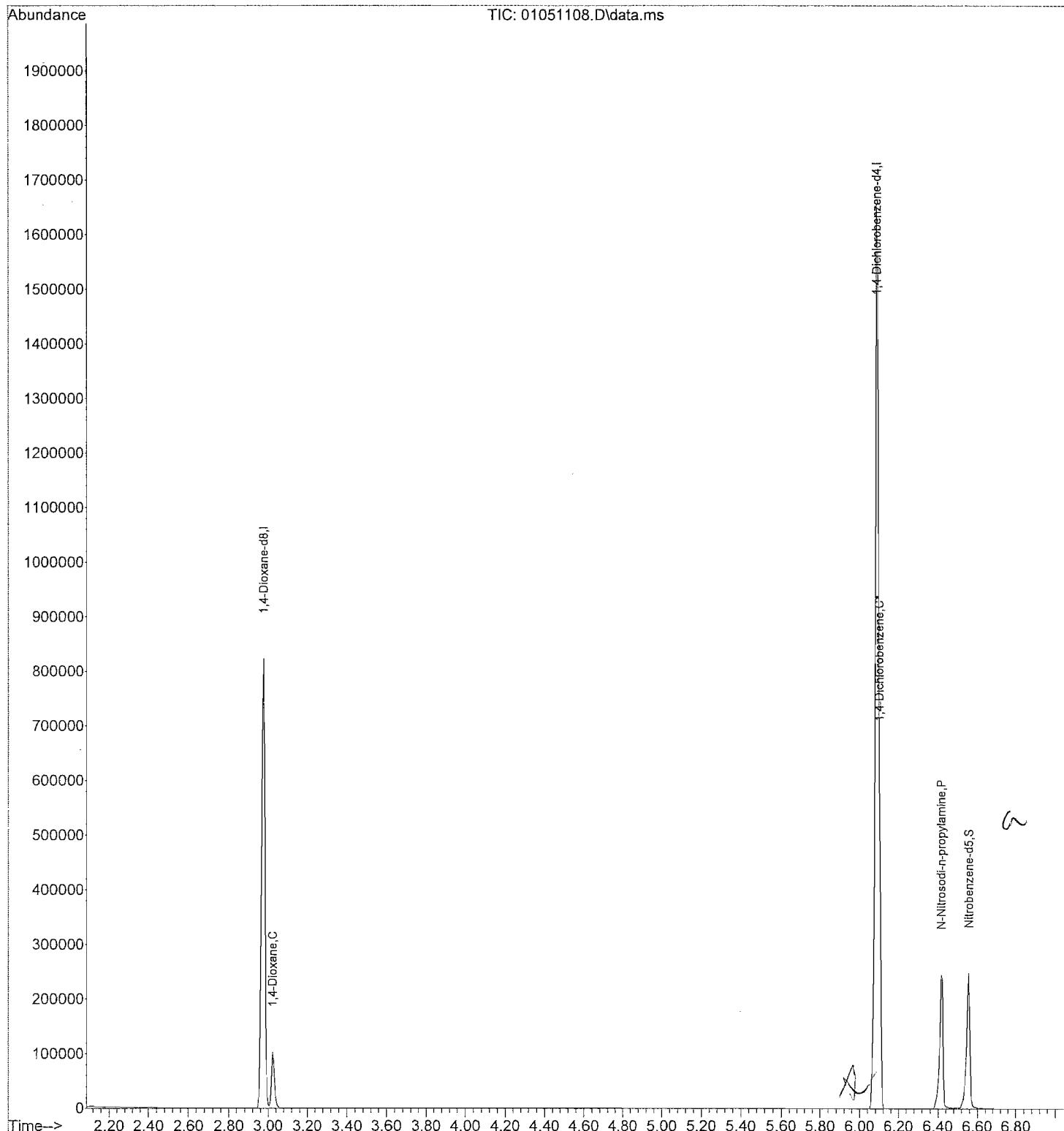
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.975	96	323796	20.00	ug/mL	0.03
3) 1,4-Dichlorobenzene-d4	6.087	152	240424	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	92526	2.87	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.022	88	34074	2.09	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	83920	2.15	ug/mL	99
5) N-Nitrosodi-n-propylamine	6.416	70	59969	2.84	ug/mL	99

(#= qualifier out of range (m)= manual integration (+)= signals summed

*SL*

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051108.D  
Acq On : 5 Jan 2011 11:46 am  
Operator : CL  
Sample : 2.0ug/mL PU00061  
Misc : 1, 4-DIOXANE  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1, 4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 12:19:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 957	96	/304589	20. 00	ug/mL	0. 01
3) 1, 4-Dichlorobenzene-d4	6. 092	152	229794	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	173101	5. 62	ug/mL	0. 00
Target Compounds						
2) 1, 4-Dioxane	3. 004	88	65016	4. 24	ug/mL	100
4) 1, 4-Dichlorobenzene	6. 104	146	157766	4. 23	ug/mL	98
5) N-Nitrosodi-n-propylamine	6. 422	70	115445	5. 73	ug/mL	98

(##) = qualifier out of range (m) = manual integration (+) = signals summed

CL.S. 11

J. S. 11

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1, 4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

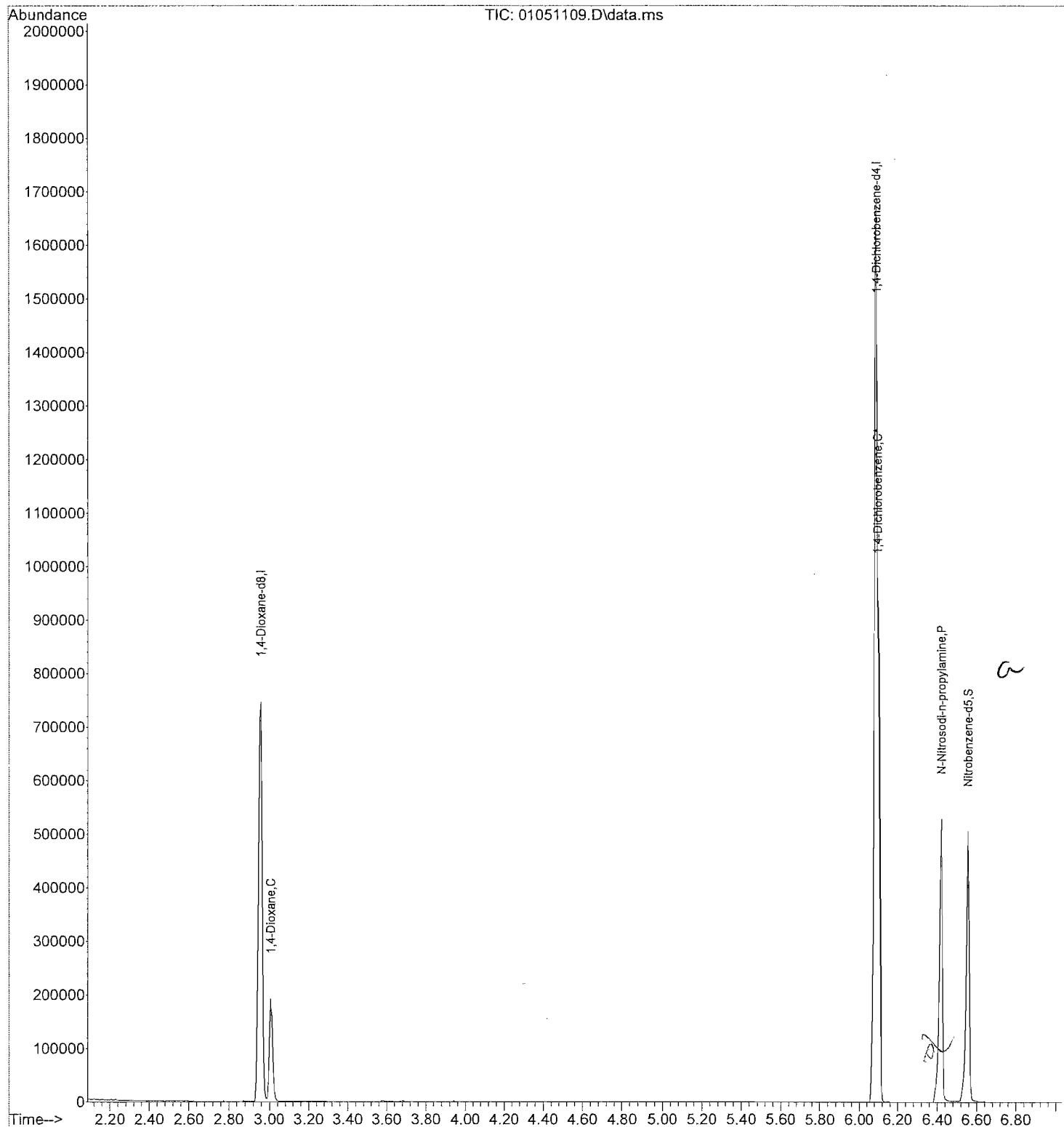
Quant Time: Jan 05 12:19:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051110.D

Acq On : 5 Jan 2011 12:12 pm

Operator : CL

Sample : 10ug/mL PU00063

Misc : 1, 4-DIOXANE

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	326940	20.00	ug/mL	0.03
3) 1, 4-Dichlorobenzene-d4	6. 092	152	243008	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	454083	13.94	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 028	88	171569	10.42	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 104	146	404965	10.27	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 422	70	304989	14.31	ug/mL	100

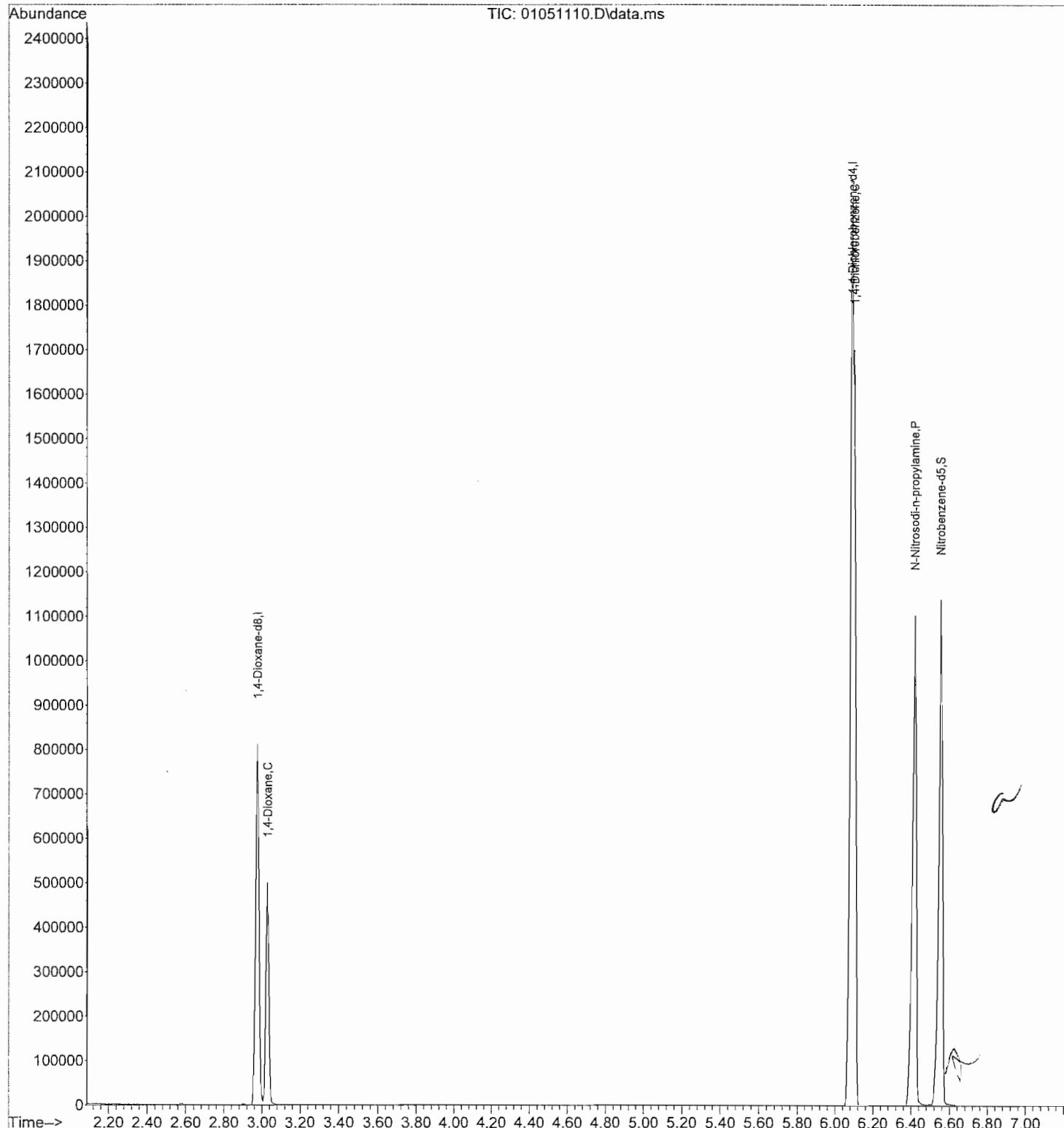
(#= qualifier out of range (m)= manual integration (+)= signals summed

21.5"

Jen

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051110.D  
Acq On : 5 Jan 2011 12:12 pm  
Operator : CL  
Sample : 10ug/mL PU00063  
Misc : 1, 4-DIOXANE  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051111.D

Acq On : 5 Jan 2011 12:25 pm

Operator : CL

Sample : 20ug/mL PU00064

Misc : 1,4-DIOXANE

ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

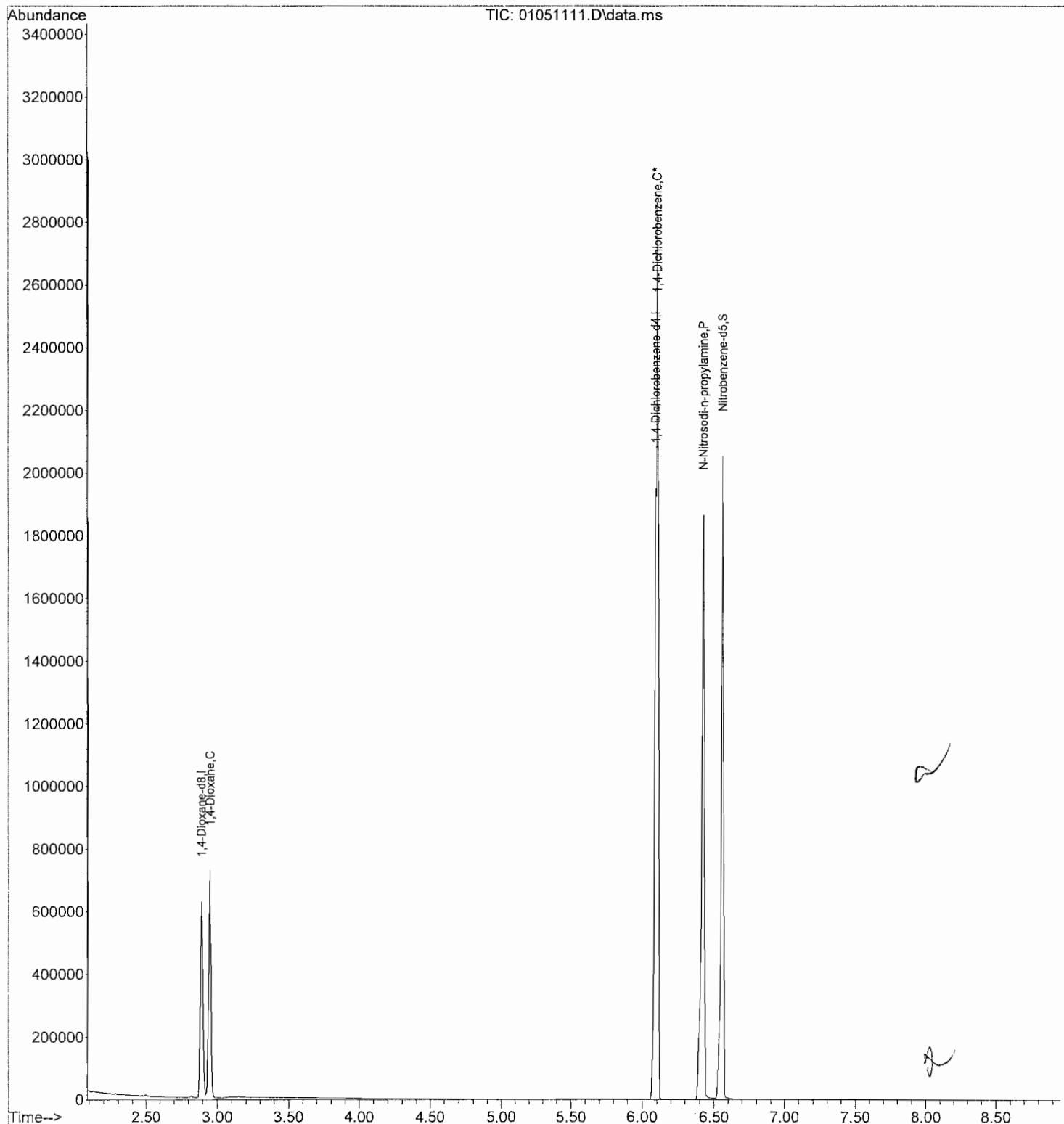
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.892	96	258958	20.00	ug/mL	-0.05
3) 1,4-Dichlorobenzene-d4	6.092	152	185062	10.00	ug/mL	0.00
<b>System Monitoring Compounds</b>						
6) Nitrobenzene-d5	6.563	82	670408	27.02	ug/mL	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	2.951	88	261828	20.07	ug/mL	100
4) 1,4-Dichlorobenzene	6.104	146	613271	20.43	ug/mL	100
5) N-Nitrosodi-n-propylamine	6.428	70	453173	27.92	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

21.5.11

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 0105111.D  
Acq On : 5 Jan 2011 12:25 pm  
Operator : CL  
Sample : 20ug/mL PU00064  
Misc : 1,4-DIOXANE  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051112.D

Acq On : 5 Jan 2011 12:41 pm

Operator : CL

Sample : 30ug/mL PU00065

Misc : 1, 4-DIOXANE

ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

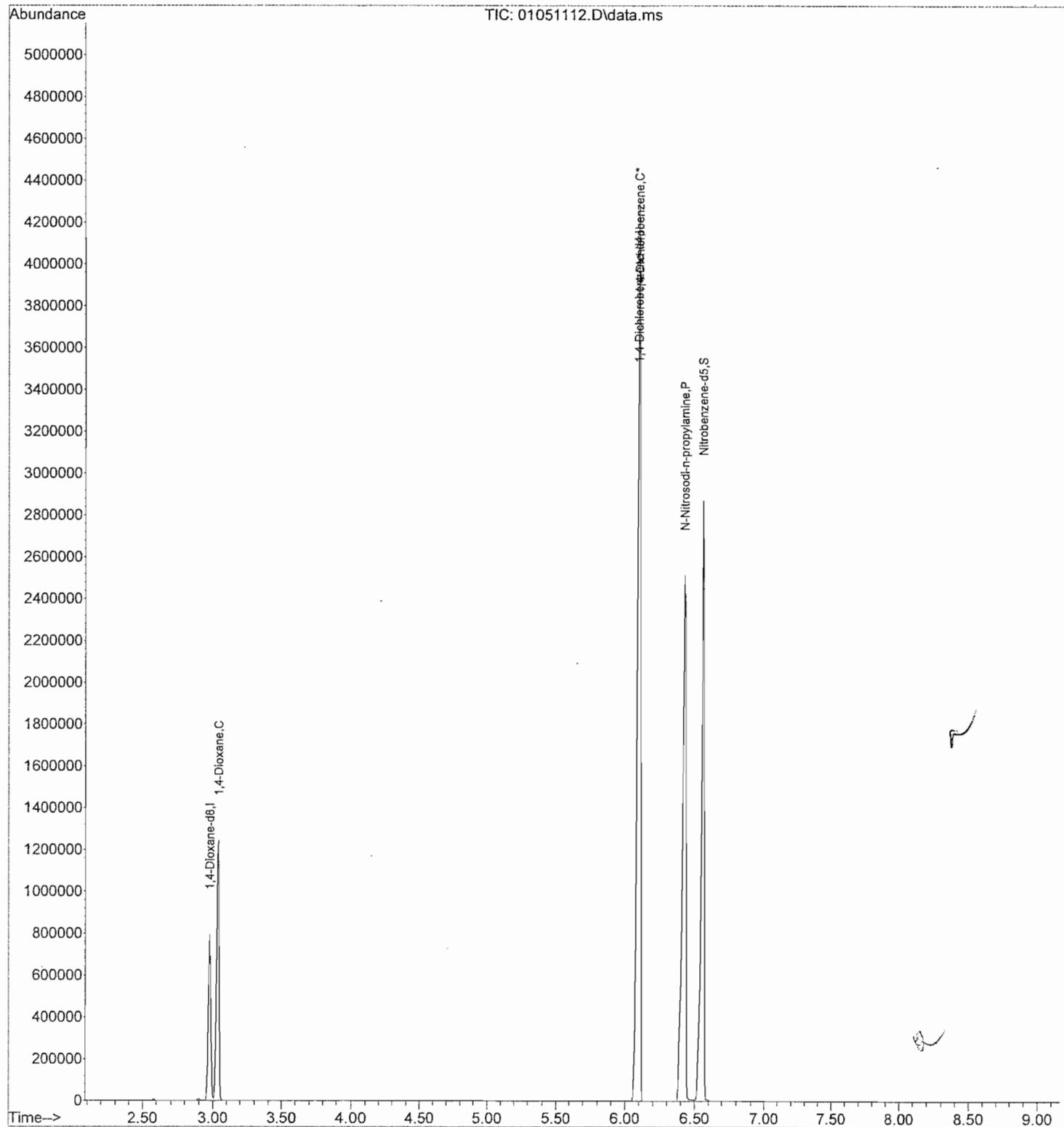
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.975	96	330882	20.00	ug/mL	0.03
3) 1, 4-Dichlorobenzene-d4	6.092	152	235894	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.563	82	1276344	40.36	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3.040	88	495415	29.72	ug/mL	98
4) 1, 4-Dichlorobenzene	6.104	146	1137949	29.74	ug/mL	100
5) N-Nitrosodi-n-propylamine	6.428	70	858130	41.47	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

1.511

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051112.D  
Acq On : 5 Jan 2011 12:41 pm  
Operator : CL  
Sample : 30ug/mL PU00065  
Misc : 1, 4-DIOXANE  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1,4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 875	96	235570	20.00	ug/mL	-0.07
3) 1, 4-Dichlorobenzene-d4	6. 093	152	170137	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 569	82	1198475	52.55	ug/mL	0.01
Target Compounds						
2) 1, 4-Dioxane	2. 940	88	479723	40.42	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 110	146	1084666	39.30	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 434	70	813006	54.48	ug/mL	100

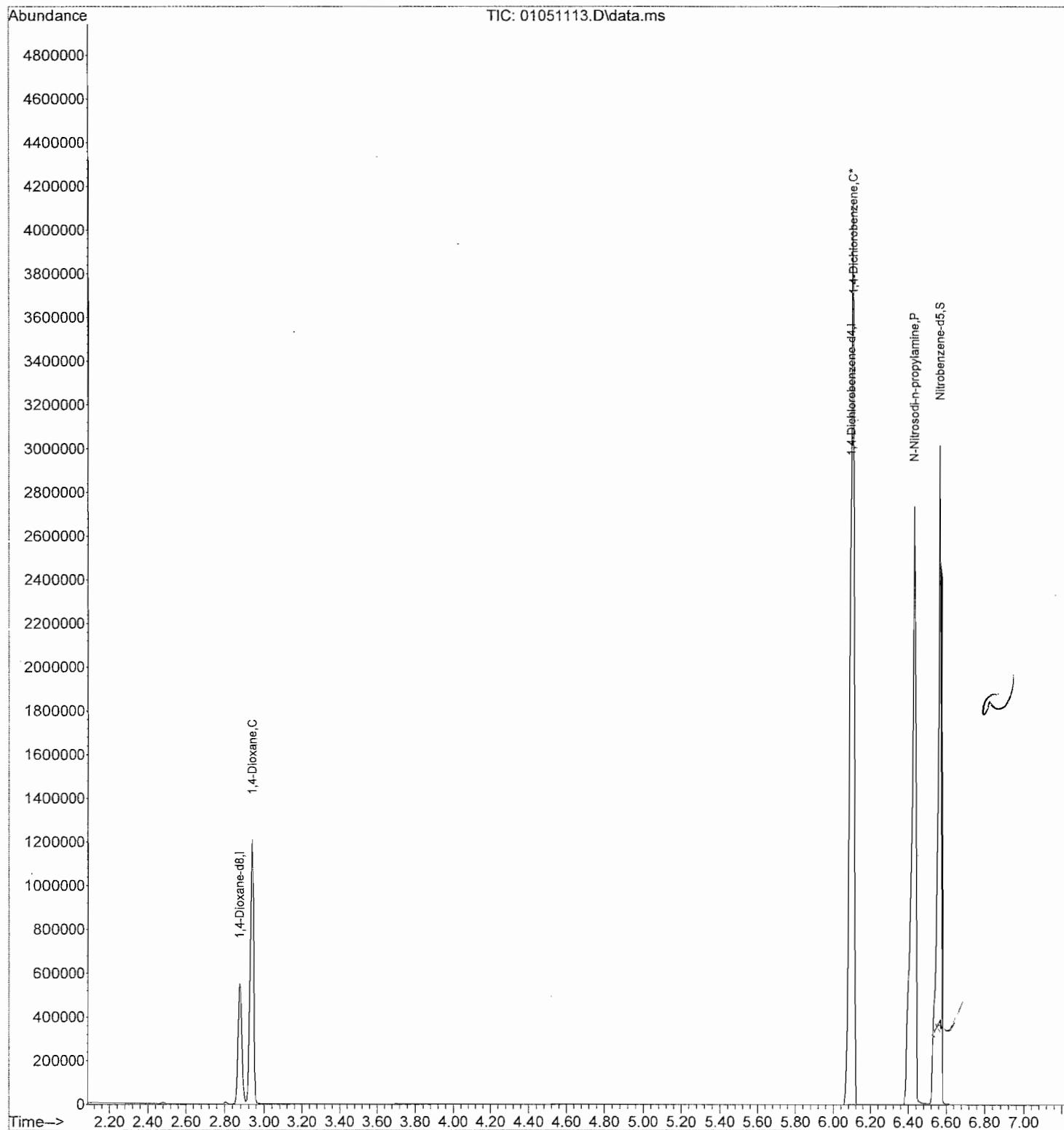
(#= qualifier out of range (m)= manual integration (+)= signals summed

✓.5.11  
✓.5.11

✓.5.11

Data Path : D:\msdchem\Y1\GCMS14\DATA\Y010511\Y  
Data File : 01051113.D  
Acq On : 5 Jan 2011 12:58 pm  
Operator : CL  
Sample : 40ug/mL PU00066  
Misc : 1, 4-DIOXANE  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\Y14DIOXANE\Y010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.787	96	203549m	20.00	ug/mL	-0.16
3) 1,4-Dichlorobenzene-d4	6.092	152	140662	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.581	82	2386881	126.59	ug/mL	0.02
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	957052m	93.33	ug/mL	
4) 1,4-Dichlorobenzene	6.110	146	2103702	92.19	ug/mL	100
5) N-Nitrosodi-n-propylamine	6.451	70	1646696	133.46	ug/mL	99

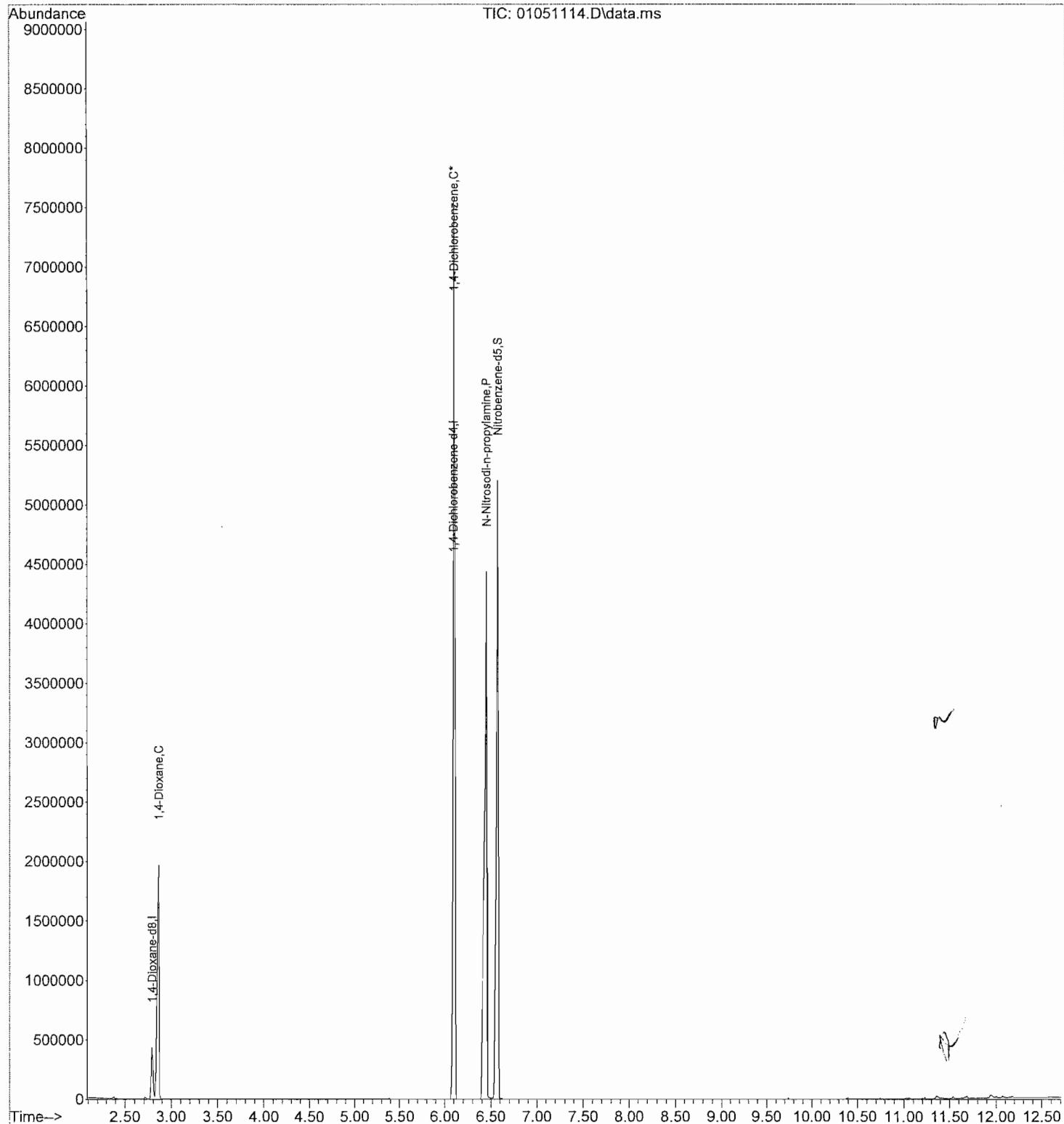
(#= qualifier out of range (m)= manual integration (+)= signals summed

✓ 1.5

JFCU

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051114.D  
Acq On : 5 Jan 2011 1:11 pm  
Operator : CL  
Sample : 100ug/mL PU0067  
Misc : 1, 4-DIOXANE  
ALS Vial : 14 Sample Multiplier: 1

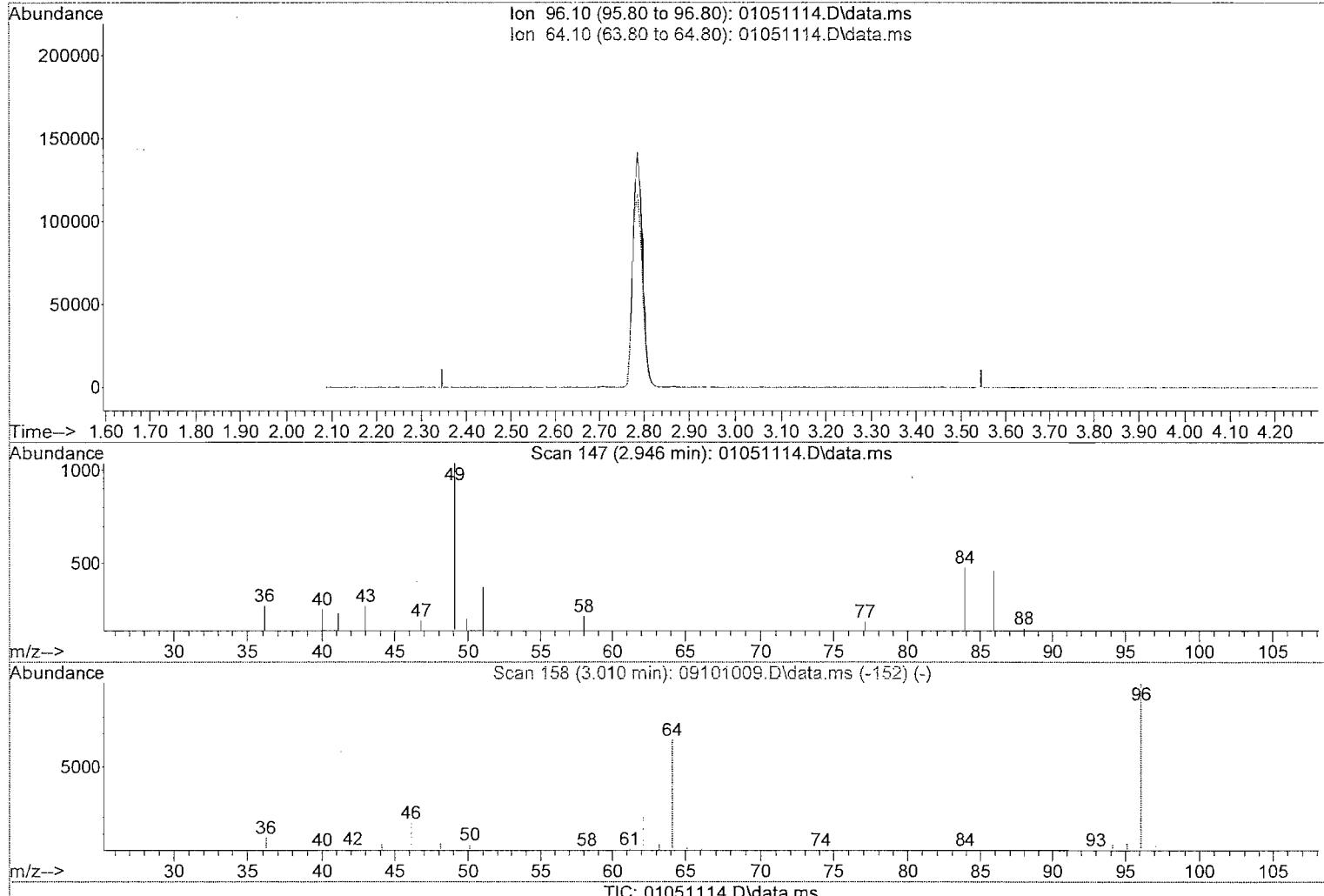
Quant Time: Jan 05 13:26:30 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.946min (-2.946) 0.00ug/mL

response 0

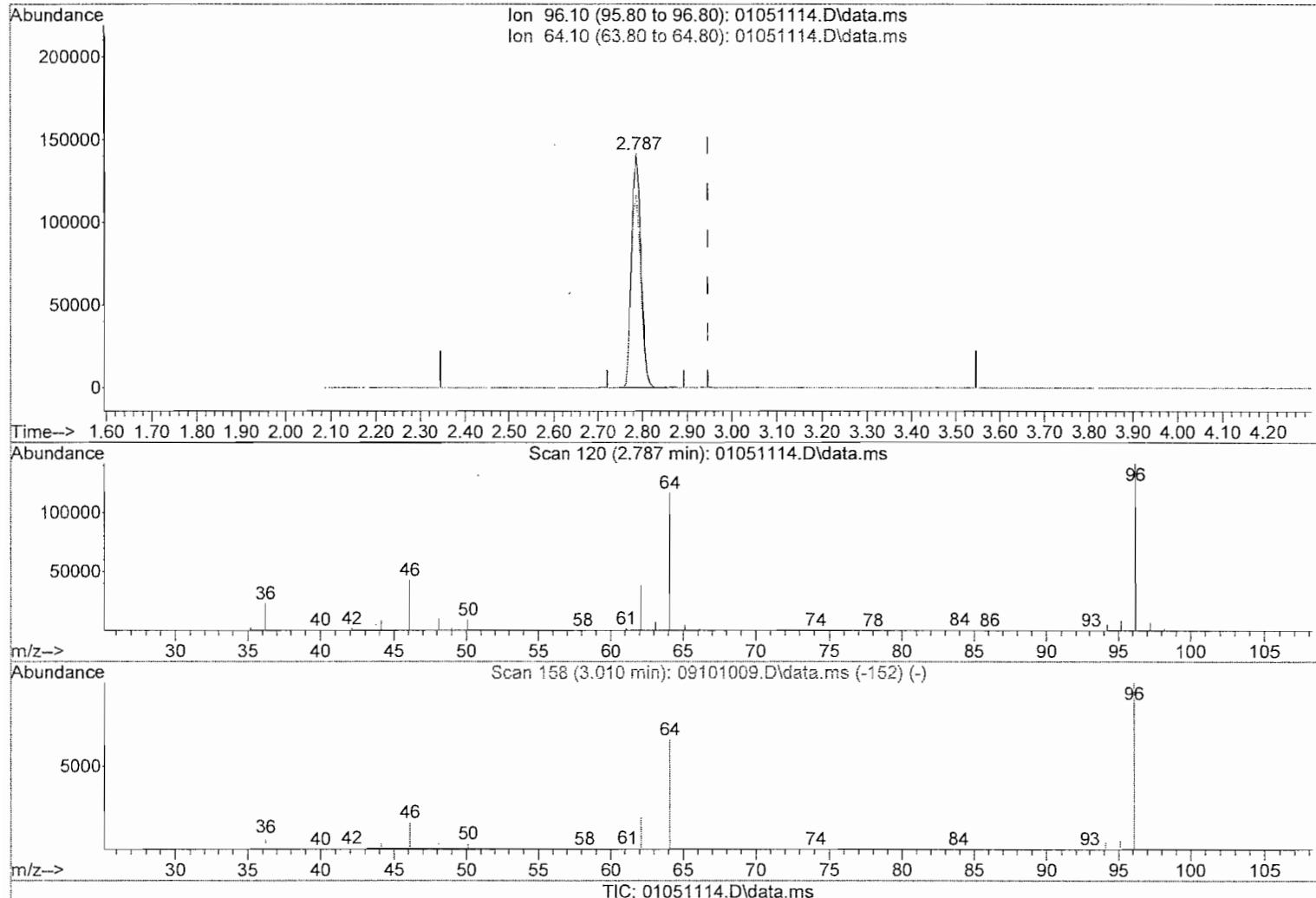
Ion	Exp%	Act%
96.10	100	0.00
64.10	83.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

1/5/11 AFSCN

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (l)

2.787min (-0.159) 20.00ug/mL m

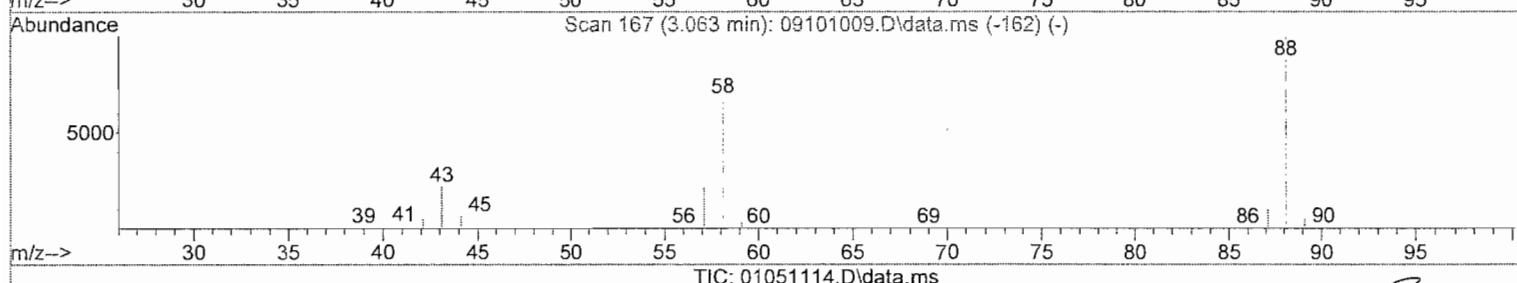
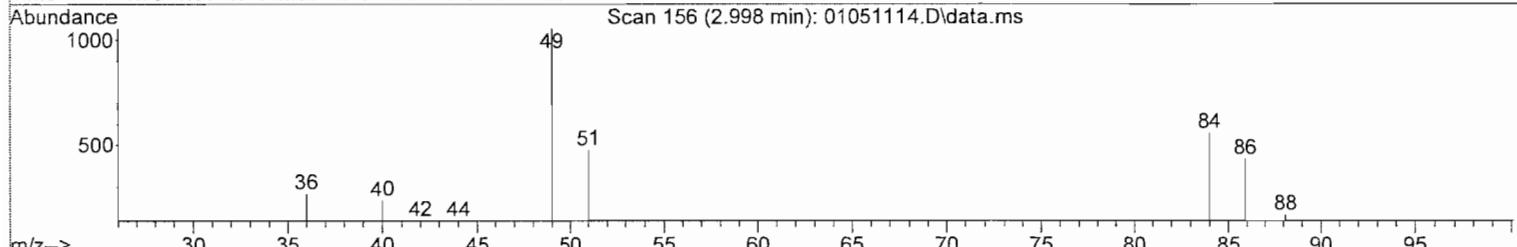
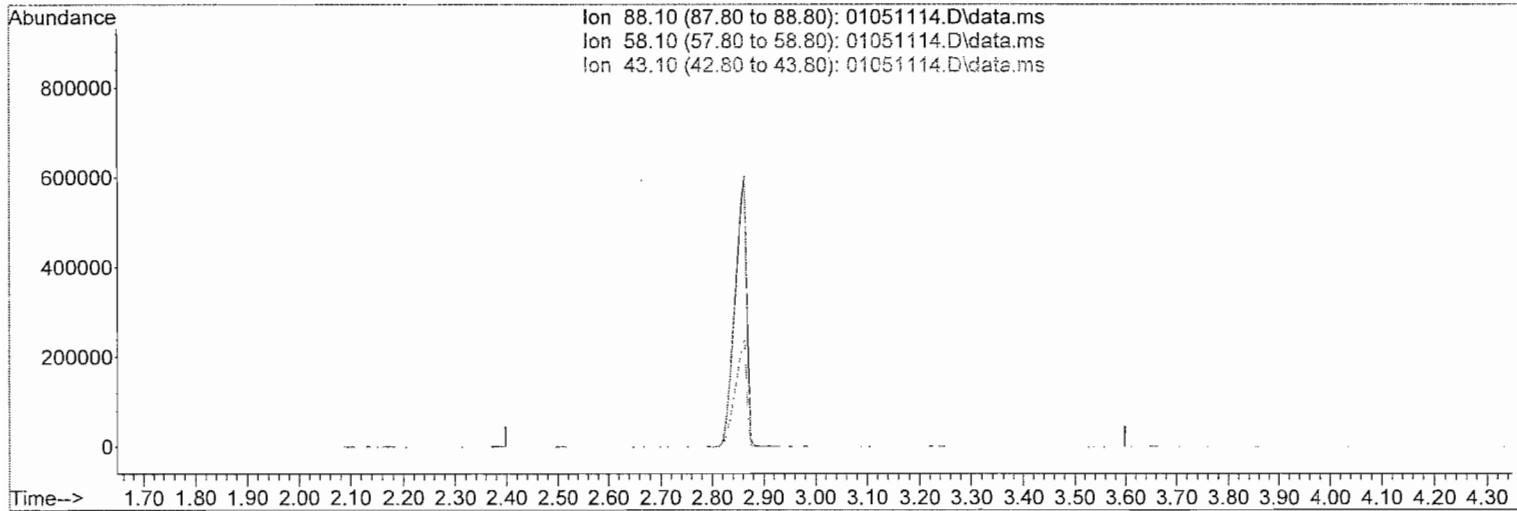
response 203549

Ion	Exp%	Act%
96.10	100	100
64.10	83.80	83.74
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.998min (-2.998) 0.00ug/mL

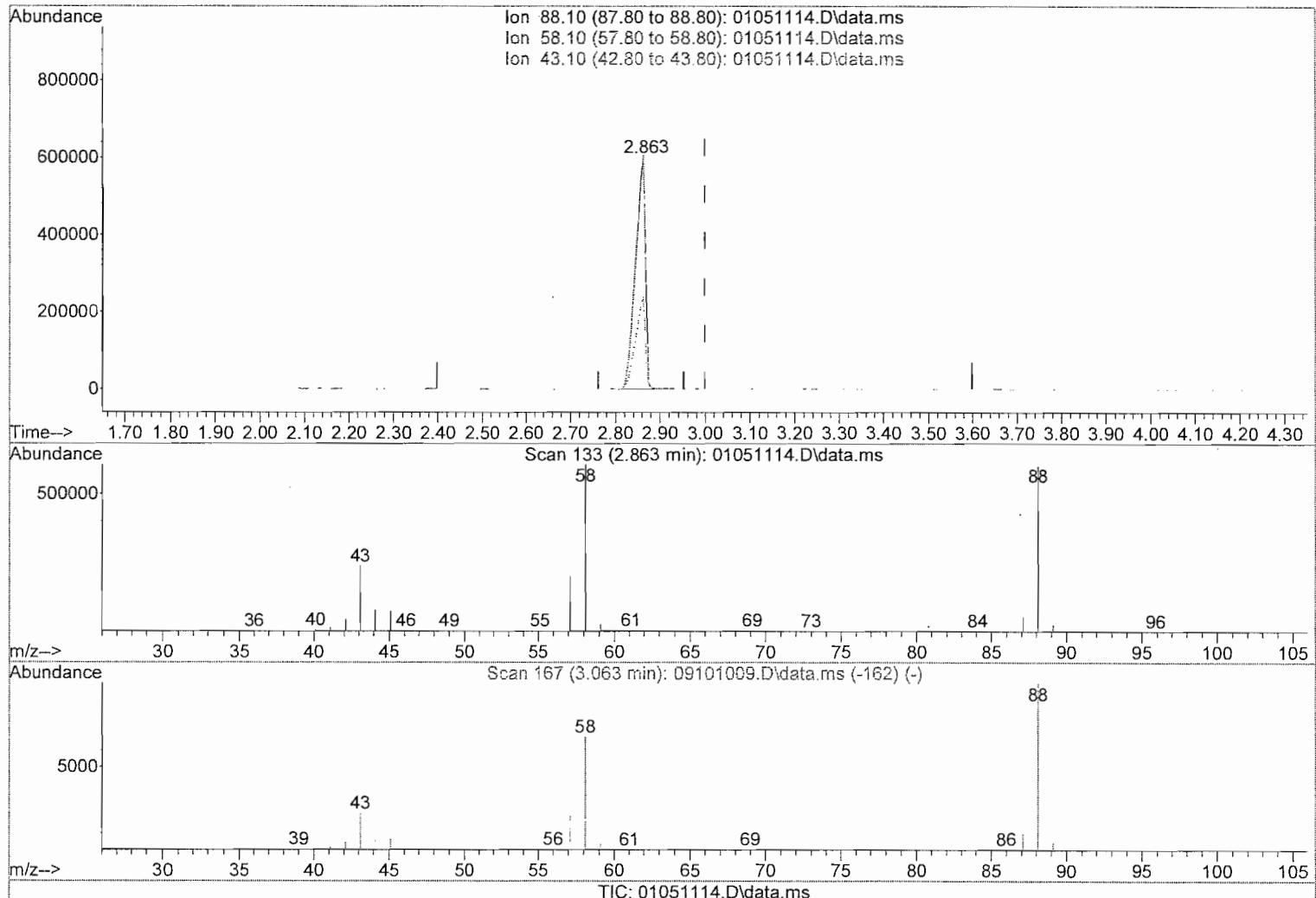
response 0

Ion	Exp%	Act%
88.10	100	0.00
58.10	97.70	0.00#
43.10	38.10	0.00#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.863min (-0.135) 93.33ug/mL m

response 957052

Ion	Exp%	Act%
88.10	100	100
58.10	97.70	100.08
43.10	38.10	38.93
0.00	0.00	0.00

an. 5-11

AP/SP

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051115.D  
 Acq On : 5 Jan 2011 1:33 pm  
 Operator : CL  
 Sample : QCS10ug/mL PU00068  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 15 Sample Multiplier: 1

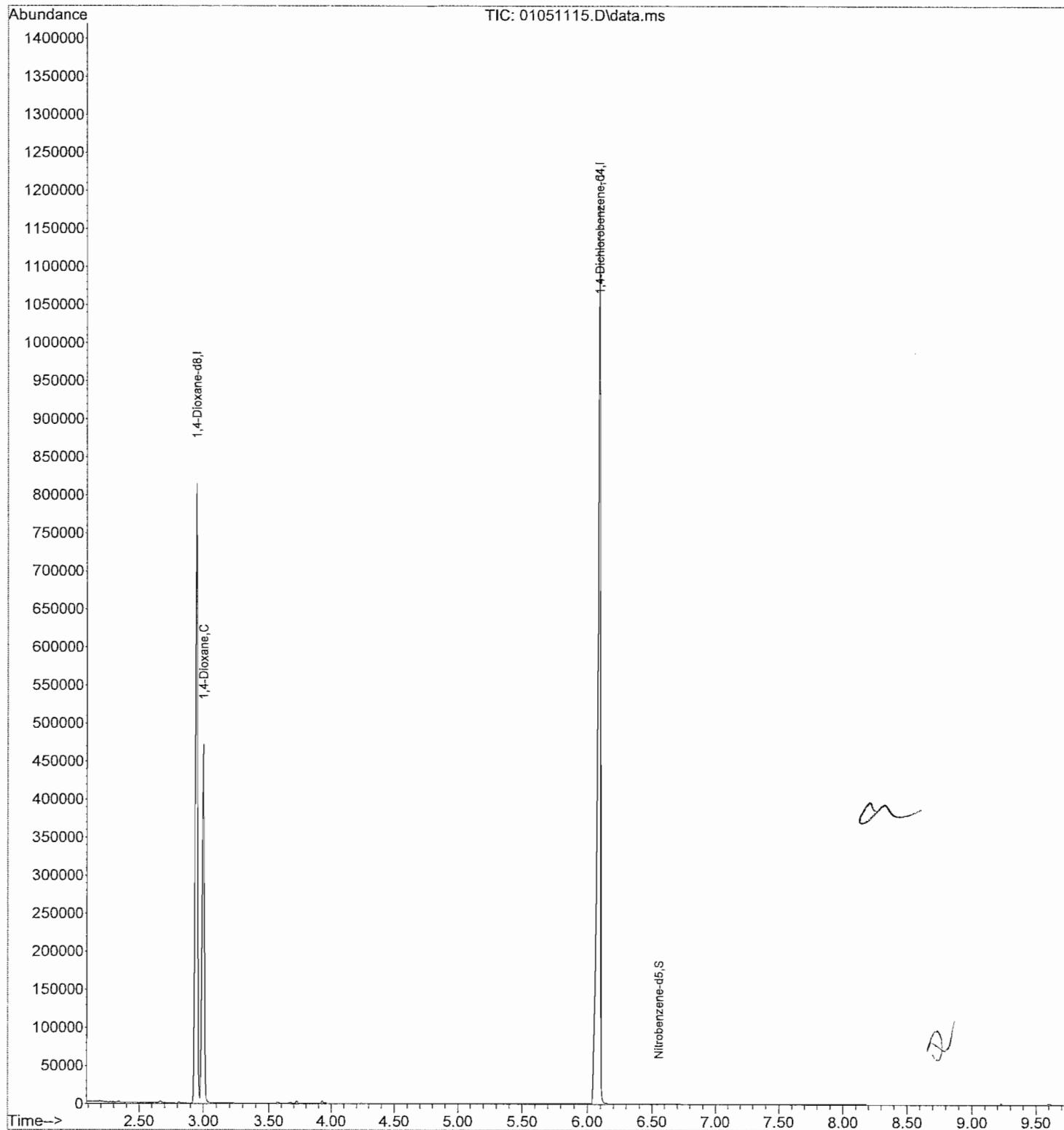
Quant Time: Jan 05 13:43:34 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 13:29:49 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 946	96	322333	20. 00	ug/mL	-0. 03
3) 1, 4-Dichlorobenzene-d4	6. 086	152	233788	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	43	0. 00	ug/mL	0. 00
Target Compounds						
2) 1, 4-Dioxane	2. 998	88	165372	10. 08	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 081	146	386	0. 01	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051115.D  
Acq On : 5 Jan 2011 1:33 pm  
Operator : CL  
Sample : QCS10ug/mL PU00068  
Misc : 1, 4-DIOXANE  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 05 13:43:34 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 13:29:49 2011  
Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL DATA

METHOD: EPA 8270C

DATE: 03/16/11

WORK ORDER: PUC0730-01

Attachment 9  
**ANALYTICAL DATA REVIEW CHECKLIST**

 SOP PE-SVD-014 R.1  
 1, 4-Dioxane by Modified EPA 8270C

Analyst:	C. Lewis	Batch ID#	LC 0526	Date Analyzed:	3/16/11
	Description	Yes	No	NA <sup>1</sup>	
1.	Tune <i>3:45 PM 3-16-11</i>				
-	DFTPP (50 ng) meets method criteria?				
-	Tailing – Benzidine (Base/Neutrals) ≤ 3.0?				
-	All samples analyzed <12 hours from time of Tune?	✓			
2.	Calibration Curve (minimum of 5 levels)	/			
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?	/			
-	CCC 1,4-Dichlorobenzene ≤30%	/			
-	All compounds RSD ≤20% or linear/quadratic $r^2 \geq 0.99$	/			
-	QCS recovered ± 30%	/			
-	Date of Initial Calibration: 01/05/11 Instrument: GC/MS/14				
3.	Retention Times Updated?	✓			
4.	CCVs all analytes recovered within ± 20% (includes CCC 1, 4-Dichlorobenzene)?	/			
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?	/			
-	Internal Standard RT ± 0.5 min. from 10 ppb std. in ICAL?	/			
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?	/			
-	Analyte RRTs ± 0.06 from 50 ppb std. in ICAL?	/			
5.	Method Blank extracted with batch?	/			
-	All target analytes recovered <RL?	/			
6.	LCS/LCSD extracted with batch?	/			
-	Recoveries within Laboratory Limits?	/			
-	RPDs ≤ Laboratory Limits?	/			
7.	MS/MSD extracted with batch?				
-	Recoveries within Historical Limits?				
-	RPDs Laboratory Limits?				
8.	Samples extracted within 7 days from collection?	/			
-	Samples analyzed within 40 days from extraction?	/			
-	Internal Standard RT ± 0.5 min. from CCV?	/			
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL? <i>+10 ug/mL</i>	/			
-	Maximum of 20 samples in batch?	/			
-	Surrogate recoveries within Historical Limits?	/			
Comments: IS Element ID(s): RT 02037 (1,4-DCB-d4) me RE					

Review Signatures:	Analyst: C. Lewis	Date: 3/21/11
	Reviewer: Amy L. Lewis	Date: 3/21/11

<sup>1</sup> NA: Not Applicable

TestAmerica  
Phoenix

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\msdchem\1\GCMS14\sequence\031611.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\031611\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway

( ) Reprocessing Only ( ) Don't Inject

3/17/11

Line	Sample Name/Misc Info
1)	Sample 1 03161101 DB5MS14 DCM
2)	Sample 2 03161102 DB5MS14 DCM
3)	Sample 3 03161103 DB5MS14 DCM
4)	Sample 4 03161104 DB5MS14 25ng tune std pu01447
5)	Sample 5 03161105 DIOXANE DCM
6)	Sample 6 03161106 DIOXANE 10ug/mL 14-diox-01520
7)	Sample 7 03161107 DIOXANE DCM
8)	Sample 8 03161108 DIOXANE 11C0526-BLK1
9)	Sample 9 03161109 DIOXANE 11C0526-BS1
10)	Sample 10 03161110 DIOXANE 11C0526-BSD1
11)	Sample 11 03161111 DIOXANE PUC0730-01
12)	Sample 12 03161112 DIOXANE PUC0731-01
13)	Sample 13 03161113 DIOXANE PUC0731-02
14)	Sample 14 03161114 DIOXANE PUC0731-03
15)	Sample 15 03161115 DIOXANE PUC0731-04
16)	Sample 16 03161116 DIOXANE PUC0827-01
17)	Sample 17 03161117 DIOXANE PUC0827-02
18)	Sample 18 03161118 DIOXANE PUC0827-03
19)	Sample 19 03161119 DIOXANE PUC0827-04
20)	Sample 20 03161120 DIOXANE PUC0827-05
21)	Sample 21 03161121 DIOXANE PUC0829-01
22)	Sample 22 03161122 DIOXANE DCM
23)	Sample 23 03161123 DIOXANE DCM

3/17/11

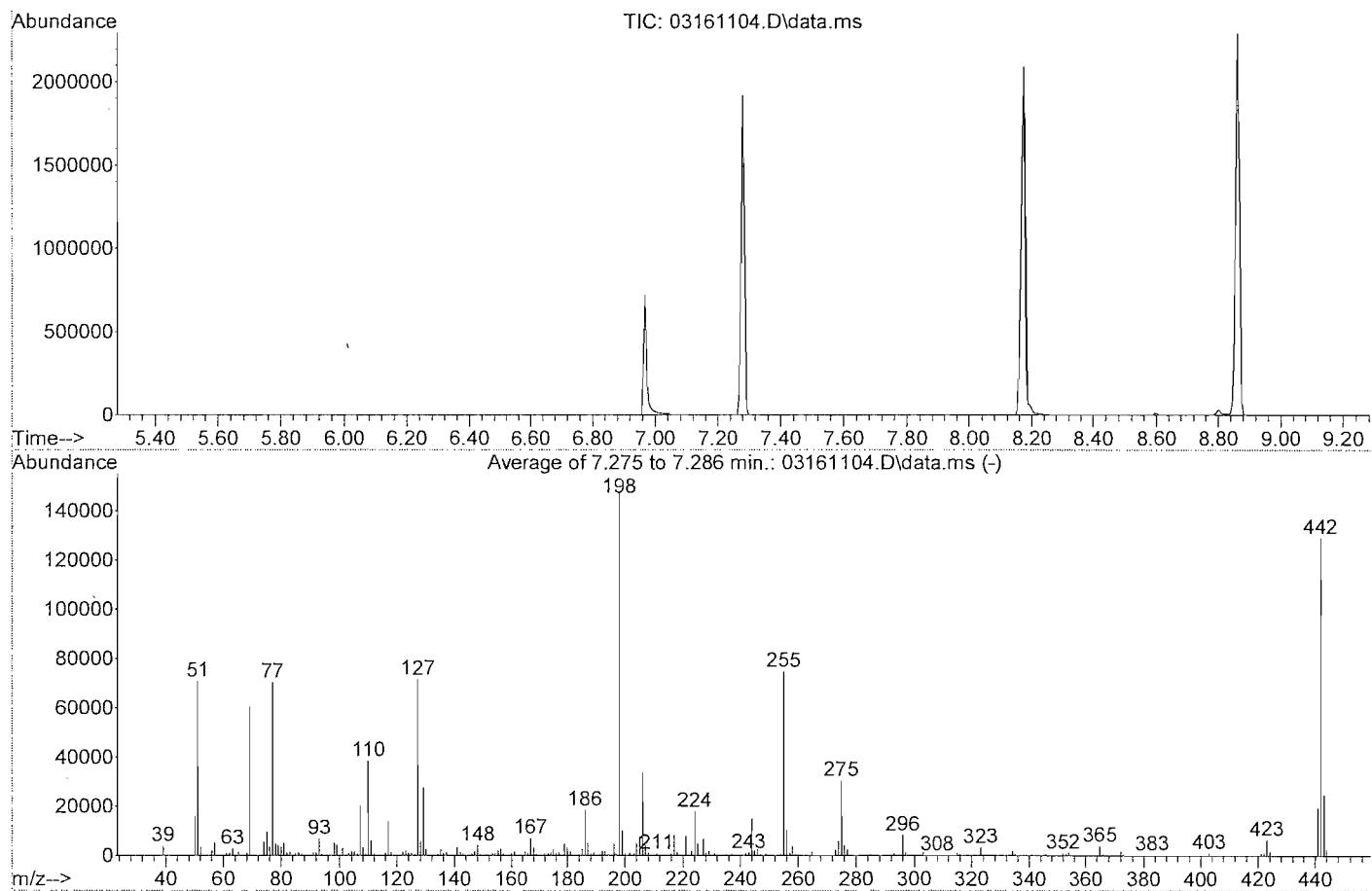
Sequence Reviewed By: a Date: 3/17/11

Date Analyzed: 3/17/11 Analyst: a Date Run: 3-16-11

Data Path : D:\msdchem\Y1\GCMS14\DATA\031611\Y  
 Data File : 03161104.D  
 Acq On : 16 Mar 2011 3:45 pm  
 Operator : CL  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\Y1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA.:ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Thu Feb 17 11:44:41 2011



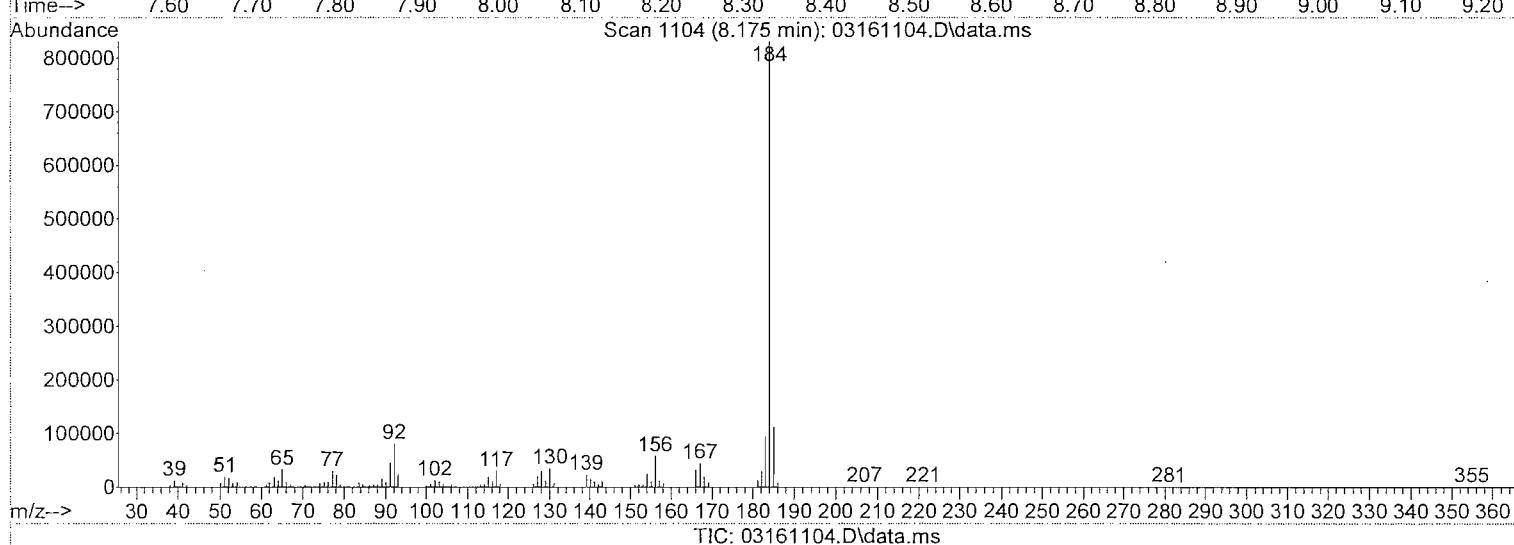
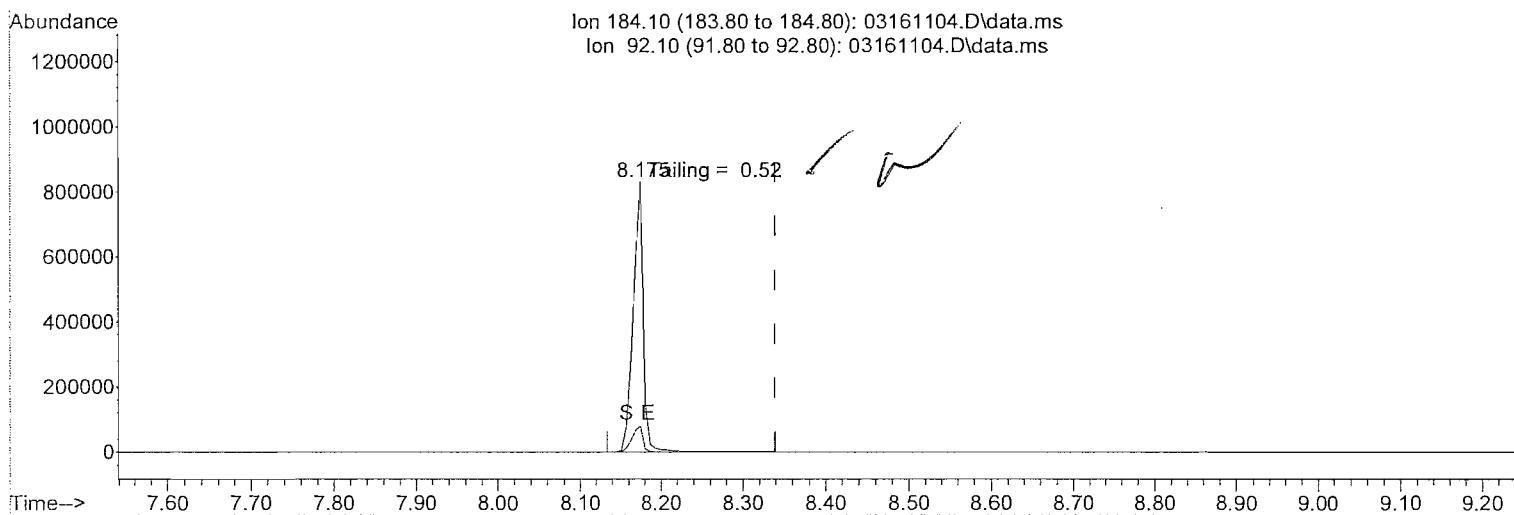
AutoFind: Scans 951, 952, 953; Background Corrected with Scan 946

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.8	70538	PASS
68	69	0.00	2	1.4	851	PASS
69	198	0.00	100	41.0	60376	PASS
70	69	0.00	2	0.5	304	PASS
127	198	40	60	48.4	71312	PASS
197	198	0.00	1	0.5	768	PASS
198	198	100	100	100.0	147437	PASS
199	198	5	9	6.8	10036	PASS
275	198	10	30	20.5	30203	PASS
365	198	1	100	2.5	3730	PASS
441	443	0.01	100	78.5	19368	PASS
442	198	40	100	87.4	128890	PASS
443	442	17	23	19.1	24671	PASS

## Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161104.D  
 Acq On : 16 Mar 2011 3:45 pm  
 Operator : CL  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 18 18:23:05 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 QLast Update : Thu Feb 17 11:44:41 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.175min (-0.164) 9.22

response 724239

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.38
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161106.D  
 Acq On : 16 Mar 2011 4:37 pm  
 Operator : CL  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

03/16/11

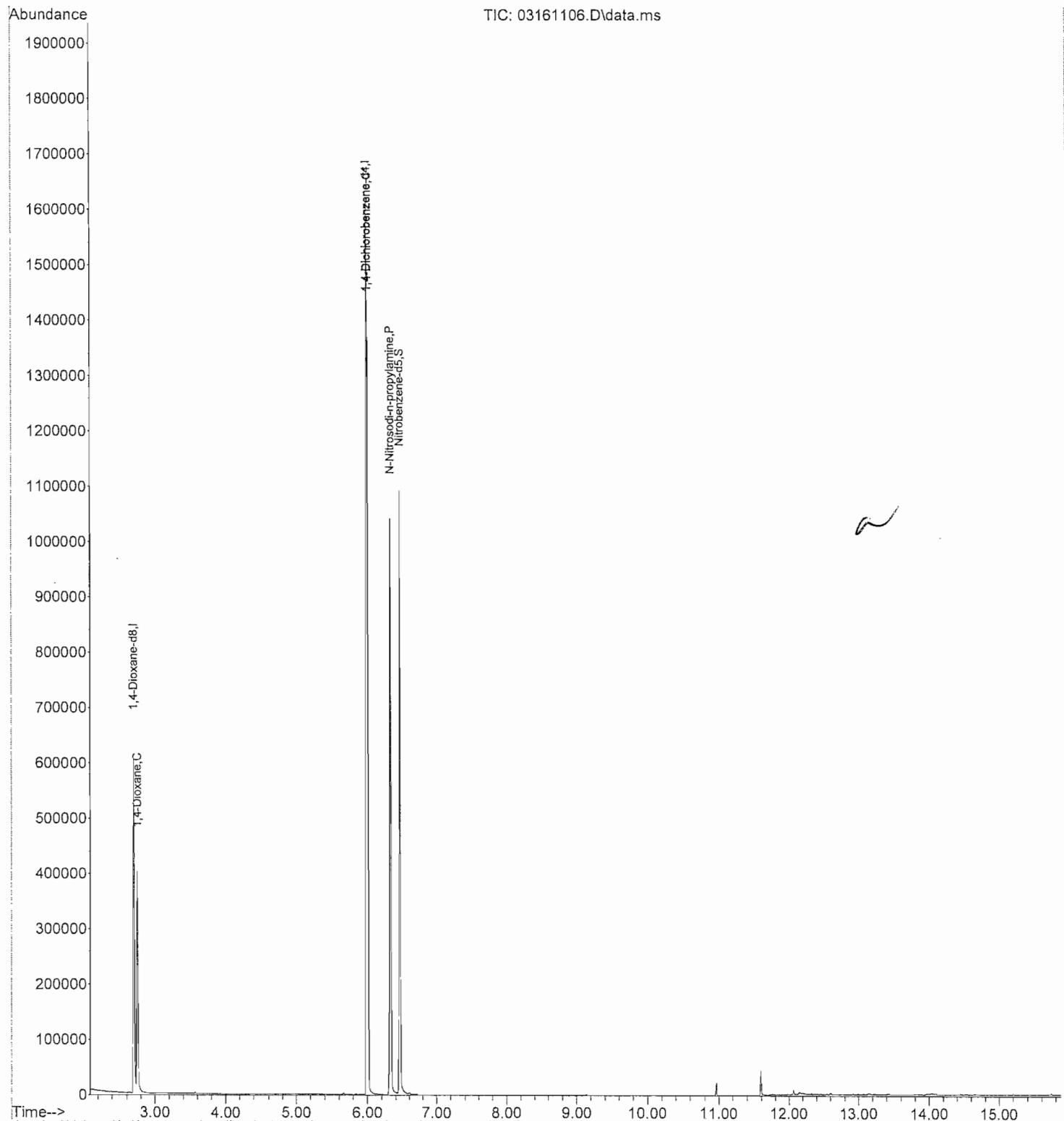
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 698	96	236131	20.00	ug/mL	-0.05
3) 1, 4-Dichlorobenzene-d4	5. 992	152	205085	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	345840	9.41	ug/mL	-0.02
Target Compounds				Qvalue		
2) 1, 4-Dioxane	2. 751	88	128882	10.73	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 010	146	352026	10.44	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 328	70	235737	9.62	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11

Data Path : D:\msdchem\Y1\GCMS14\DATA\031611\Y  
Data File : 03161106.D  
Acq On : 16 Mar 2011 4:37 pm  
Operator : CL  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dioxane-d8	96	2.746	1.000	A	1	A	B
2	C	1,4-Dioxane	88	2.793	1.017	A	2	A	B
3	I	1,4-Dichlorobenzene-d4	152	6.010	1.000	A	0	A	B
4	C*	1,4-Dichlorobenzene	146	6.028	1.003	A	1	A	B
5	P	N-Nitrosodi-n-propylamine	70	6.345	1.056	A	1	A	B
6	S	Nitrobenzene-d5	82	6.481	1.078	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

010511D.M Wed Mar 16 19:20:09 2011

03/18/11

3/21/11

## Evaluate Continuing Calibration Report

Data Path : D:\Ymsdchem\Y1\GCMS14\DATA\031611\Y  
 Data File : 03161106.D  
 Acq On : 16 Mar 2011 4:37 pm  
 Operator : CL  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011  
 Quant Method : D:\Ymsdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 40% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 400%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1, 4-Dioxane-d8	1.000	1.000	0.0	72	-0.05
2 C	1, 4-Dioxane	1.018	1.092	-7.3	75	-0.04
3 I	1, 4-Dichlorobenzene-d4	1.000	1.000	0.0	84	-0.02
4 C*	1, 4-Dichlorobenzene	1.644	1.716	-4.4	87	-0.02
5 P	N-Nitrosodi-n-propylamine	1.195	1.149	3.8	77	-0.02
6 S	Nitrobenzene-d5	1.792	1.686	5.9	76	-0.02

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

✓ 3-18-11

3/21/11

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 · Misc Info CCV  
 Instrument Name GCMS14  
 10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 DIOX010511.M  
 CCV RESPONSE ICAL RESPONSE 0.5X 2X PASS/FAIL  
 Internal Standard  
 1,4-Dichlorobenzene-d4 205085 ✓ 243008 ✓ 121504 486016 <-PASS  
 Internal Standard RT RT -0.5min. +0.5min  
 1,4-Dichlorobenzene-d4 5.99 6.09 ✓ 5.59 6.59 <-PASS

3/21/11

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063  
 0105110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 mid-RT

NAME	RT	CCV RRT	010511.M		AGREE	AGREE	PASS/FAIL
			Value	(Target/IS)			
IS 1,4-Dioxane-d8	2.698						
1,4-Dioxane	2.751		1.0196	1.0178	0.9578	1.0778	<-PASS
IS 1,4-Dichlorobenzene-d4	5.992						
1,4-Dichlorobenzene	6.010		1.0029	1.0019	0.9419	1.0619	<-PASS
N-Nitrosodi-n-propylamine	6.328		1.0559	1.0541	0.9941	1.1141	<-PASS
Nitrobenzene-d5	6.463		1.0785	1.0763	1.0163	1.1363	<-PASS

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	205085 ✓	205085✓	102542.5	410170	<PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99 ✓	5.49	6.49	<PASS

*Daily update*  
*3/18/11*

*3/18/11*

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031611\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 12:58:11 2011

Response Via : Continuing Calibration

#	ID	Conc	ISTD	Path\File
		Conc		
1	1	20	10	D:\msdchem\1\GCMS14\DATA\031611\03161106.D
2	CC	20	10	D:\msdchem\1\GCMS14\DATA\031611\03161106.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Mar 21 12:57 2011	Mar 21 12:57 2011	16 Mar 2011 4:37 pm
2	CC	Mar 21 12:58 2011	Mar 21 12:57 2011	16 Mar 2011 4:37 pm

031611\_D8.M Mon Mar 21 12:58:22 2011

3/21/11

b7r2V11

Response Factor Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031611\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 12:58:11 2011

Response Via : Continuing Calibration

Calibration Files

1 =03161106.D

	Compound	1	Avg	%RSD	
1)	I 1, 4-Dichlorobenzen...			ISTD	
2)	1, 4-Dioxane-d8	0.576		0.576	0.00

(#) = Out of Range

3/21/11  
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## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\  
Method File : 031611\_D8.M  
Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
Last Update : Mon Mar 21 12:58:11 2011  
Response Via : Continuing Calibration

Total Cpnds : 2

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I 1, 4-Dichlorobenzene-d4	152	5.992	1.000	A	0	A	B
2	1, 4-Dioxane-d8	96	2.698	0.450	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

031611\_D8.M Mon Mar 21 12:58:39 2011

✓ 3/21/11

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161106.D  
 Acq On : 16 Mar 2011 4:37 pm  
 Operator : CL  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 12:58:48 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 12:58:11 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	205085	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.698	96	236131	20.00	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

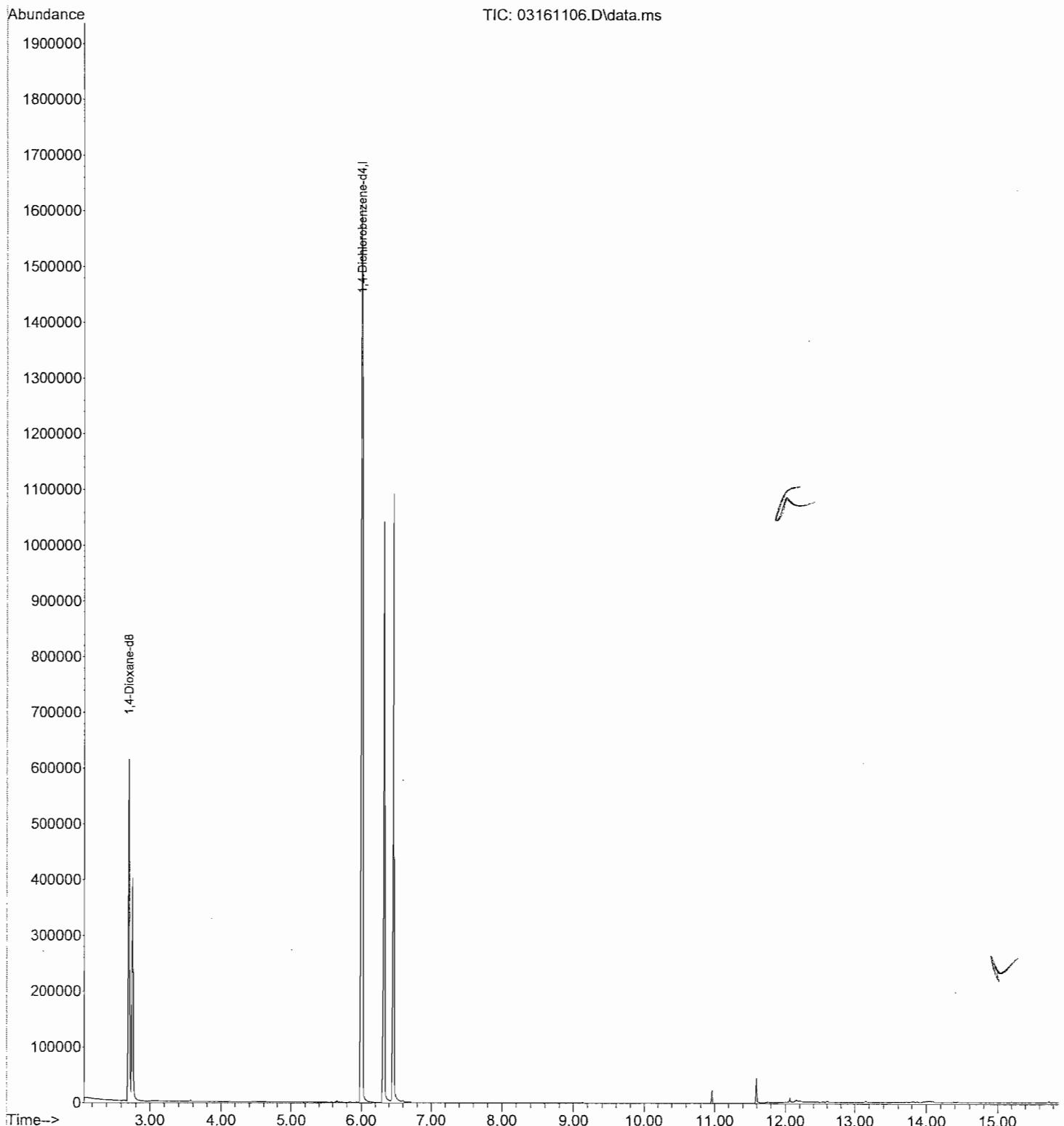
up date

ass. 21-11

3/21/11

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
Data File : 03161106.D  
Acq On : 16 Mar 2011 4:37 pm  
Operator : CL  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 12:58:48 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

02/18/11

Quant Time: Mar 17 10:06:10 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration

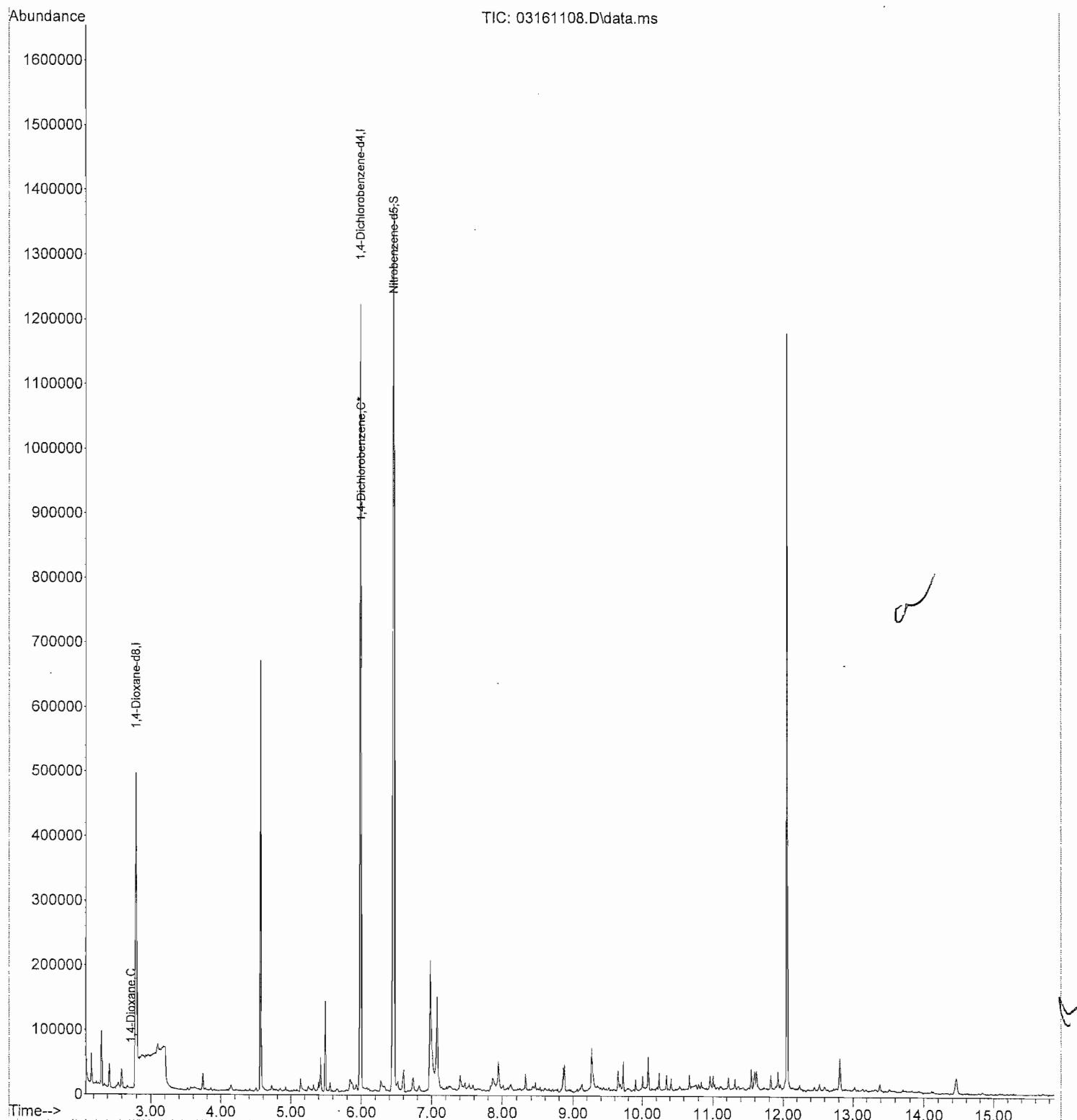
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 793	96	179535	20.00	ug/mL	0.05
3) 1, 4-Dichlorobenzene-d4	5. 993	152	214464	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	604425	15.73	ug/mL	-0.02
Target Compounds				Value		
2) 1, 4-Dioxane	2. 734	88	53	0.01	ug/mL#	1
4) 1, 4-Dichlorobenzene	6. 004	146	720	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11

Data Path : D:\msdchem\Y1\GCMS14\DATA\031611\Y  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 17 10:06:10 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511D.M  
Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0526-BLK1  
 Data File Name 03161108.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 18:31  
 Misc Info

Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	PASS/FAIL
Internal Standard				
1,4-Dichlorobenzene-d4	214464	205085	102542.5	410170 <-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49 <-PASS



3/21/11

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 13:01:38 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

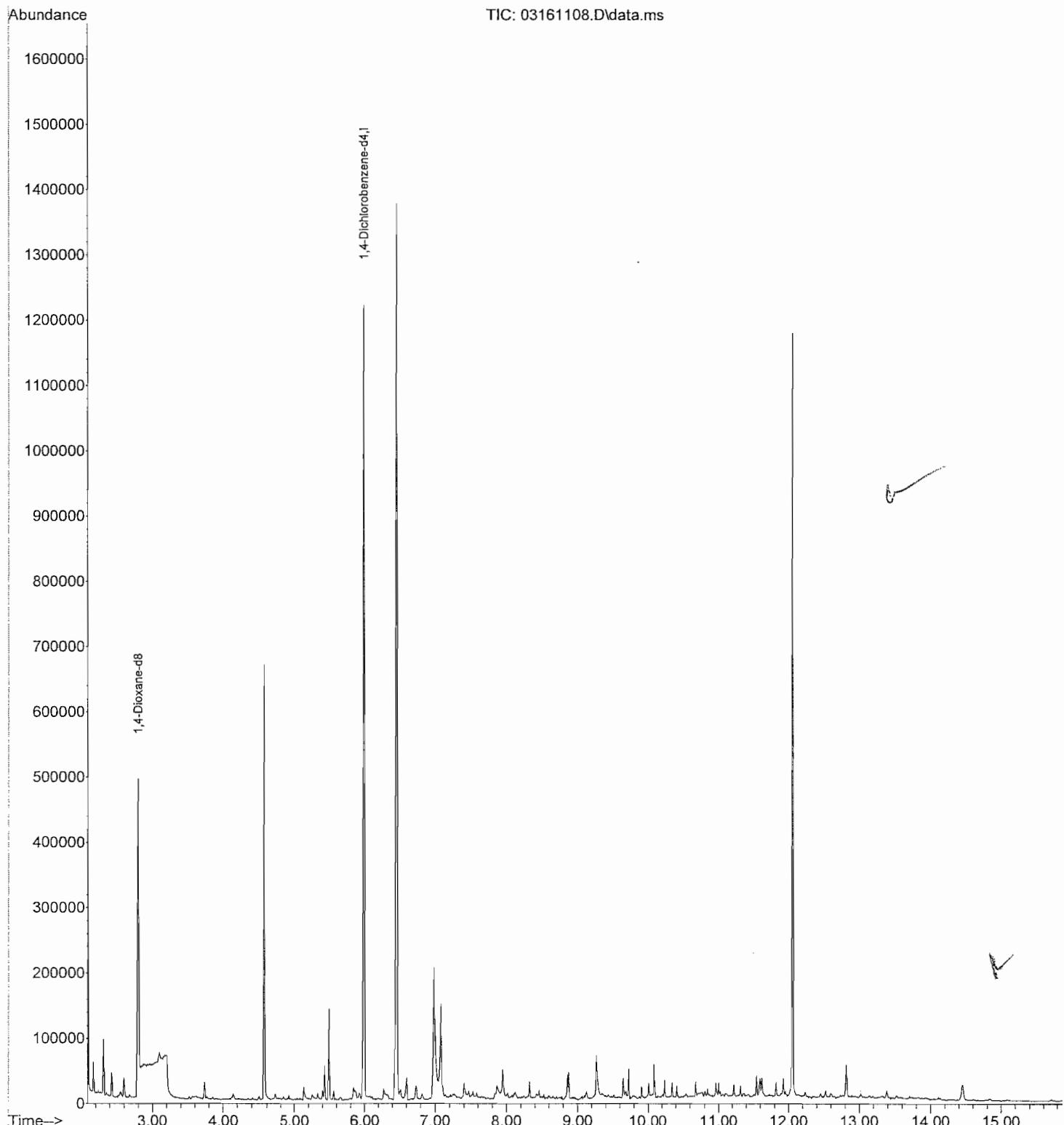
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 993	152	214464	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 793	96	179535	14. 54	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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3/21/11

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 13:01:38 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

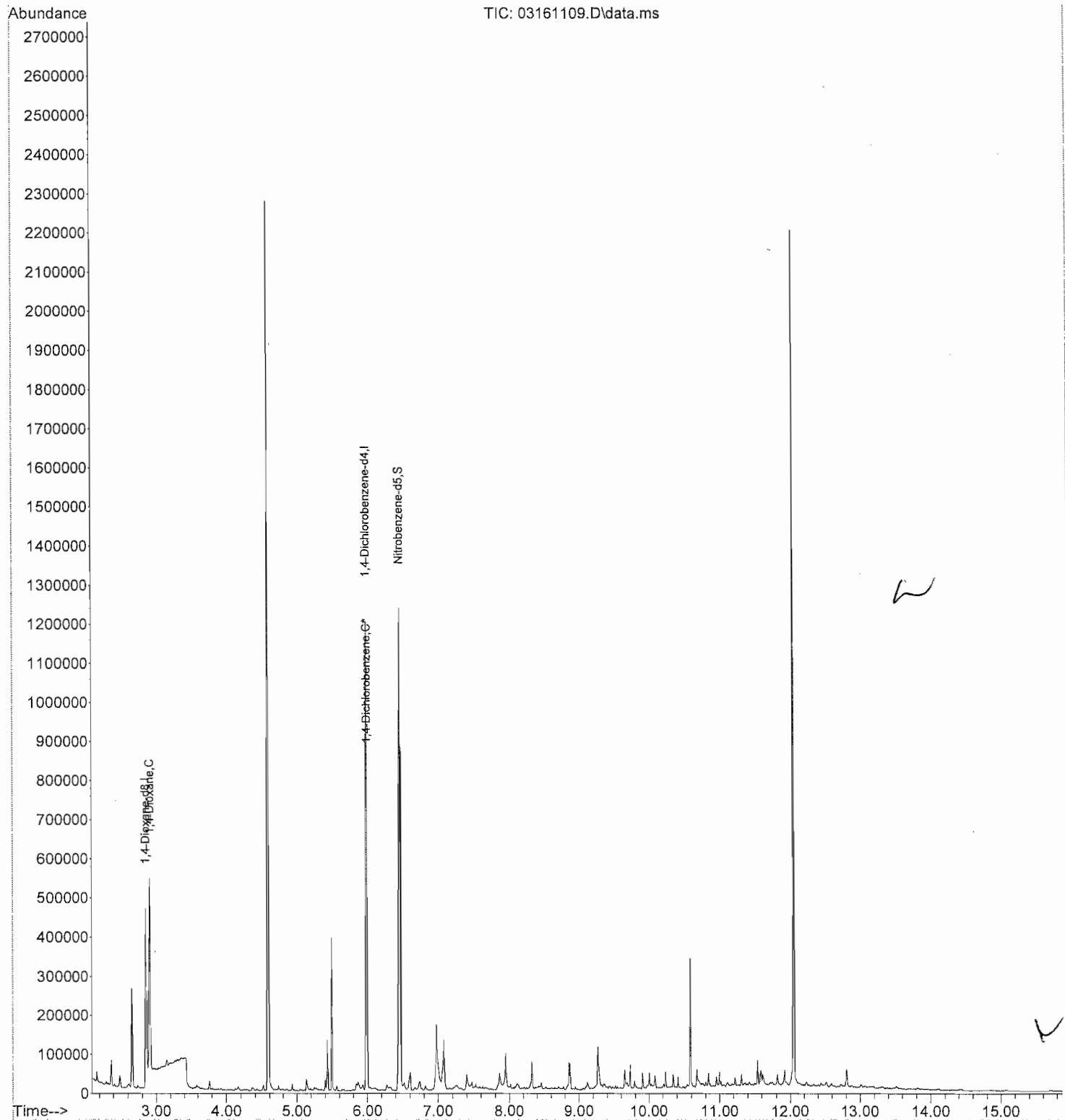
Quant Time: Mar 17 10:23:39 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 852	96	162348m	20. 00	ug/mL	0. 11
3) 1, 4-Dichlorobenzene-d4	5. 992	152	218822	10. 00	ug/mL	-0. 02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	582739	14. 86	ug/mL	-0. 02
Target Compounds						
2) 1, 4-Dioxane	2. 910	88	172534m	20. 88	ug/mL	Qvalue
4) 1, 4-Dichlorobenzene	6. 004	146	619	0. 02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

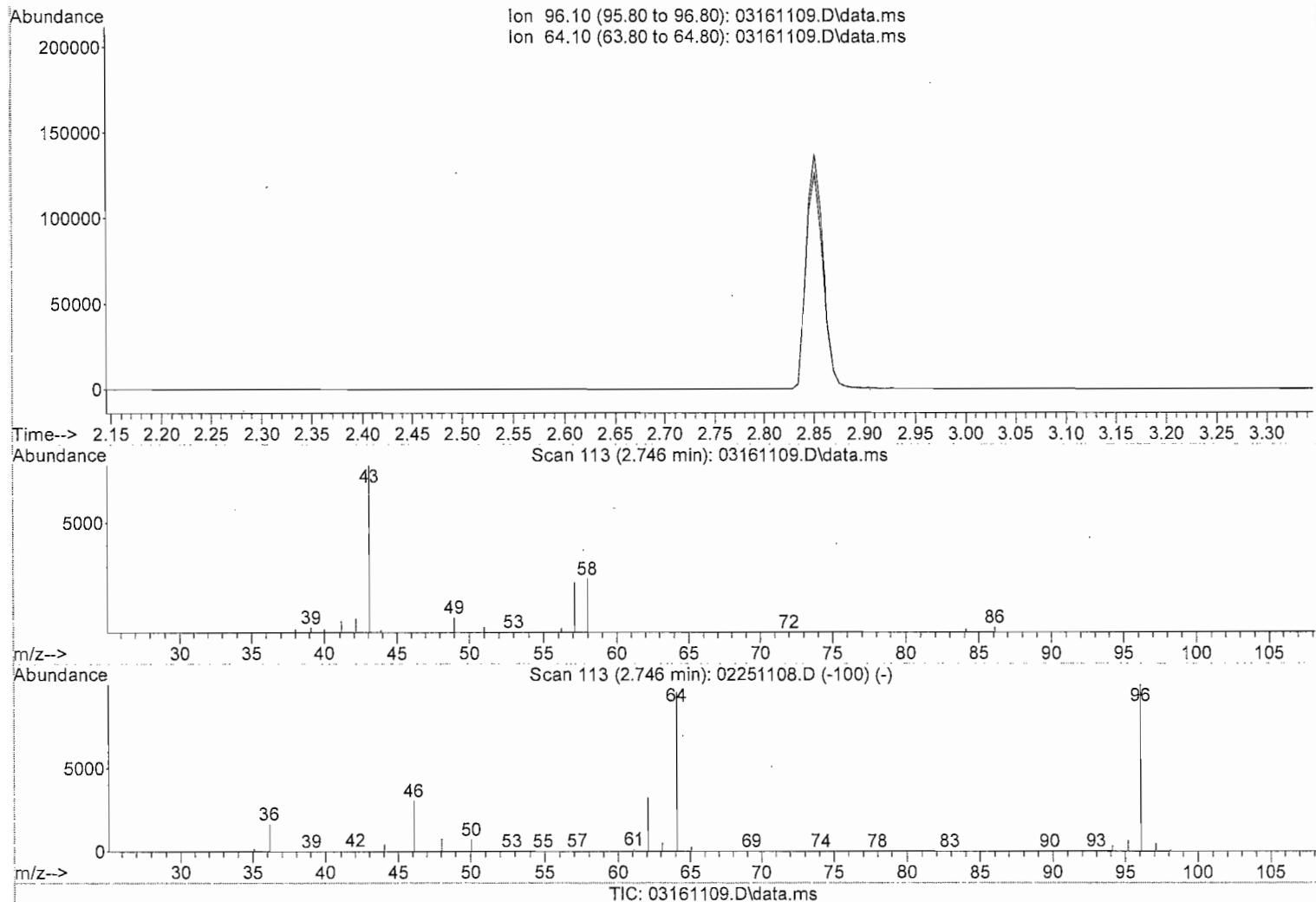
Quant Time: Mar 17 10:23:39 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\Y  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\msdcchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.746min (-2.746) 0.00ug/mL

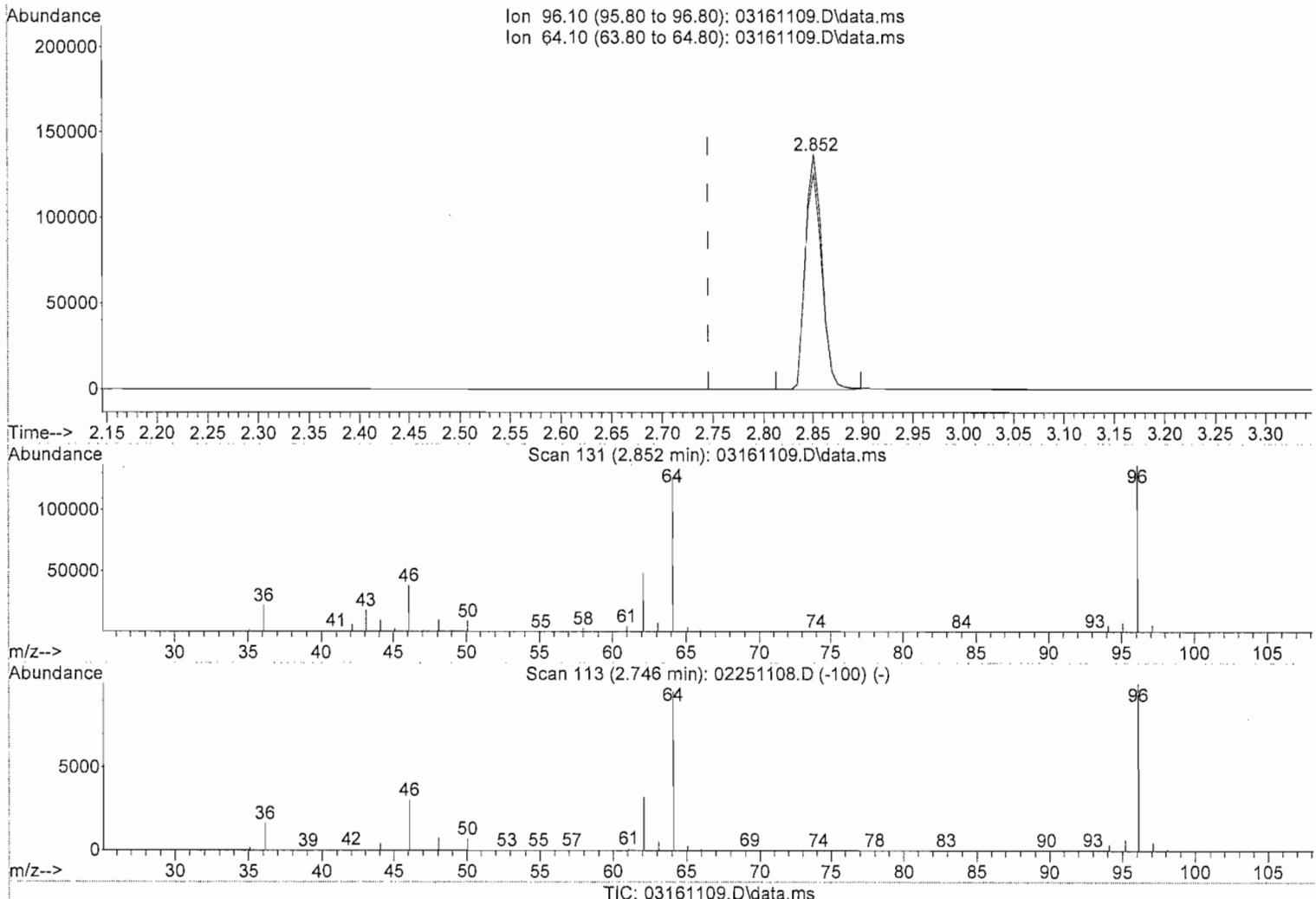
response 0

Ion	Exp%	Act%
96.10	100	0.00
64.10	93.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : D:\YMSDCHEM\1\GCMS14\DATA\031611\Y  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\Ymsdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (!)

2.852min (+0.106) 20.00ug/mL m

response 162348

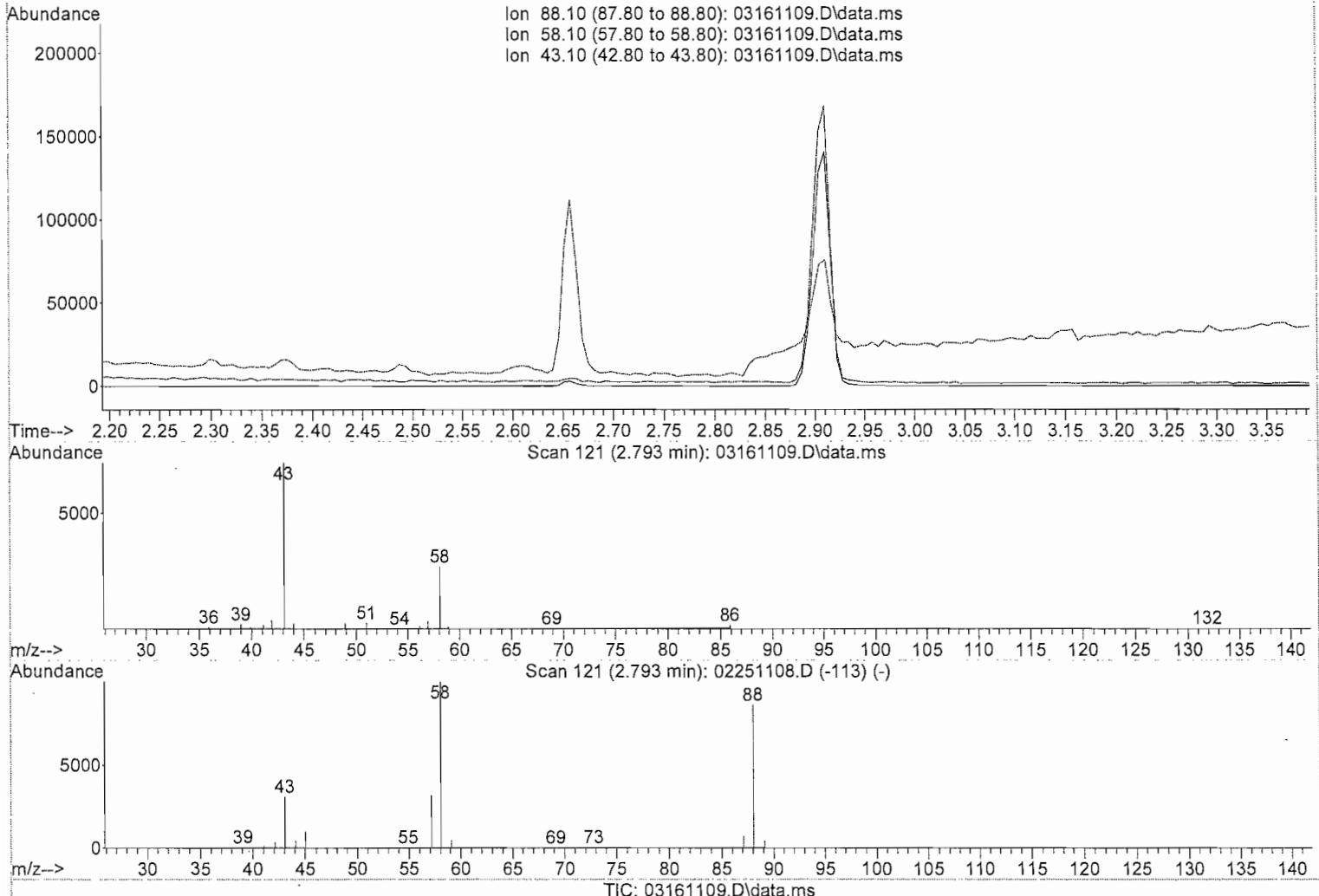
Ion	Exp%	Act%
96.10	100	100
64.10	93.60	92.65
0.00	0.00	0.00
0.00	0.00	0.00

M  
3/21/11

## Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\Y  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.793min (-2.793) 0.00ug/mL

response 0

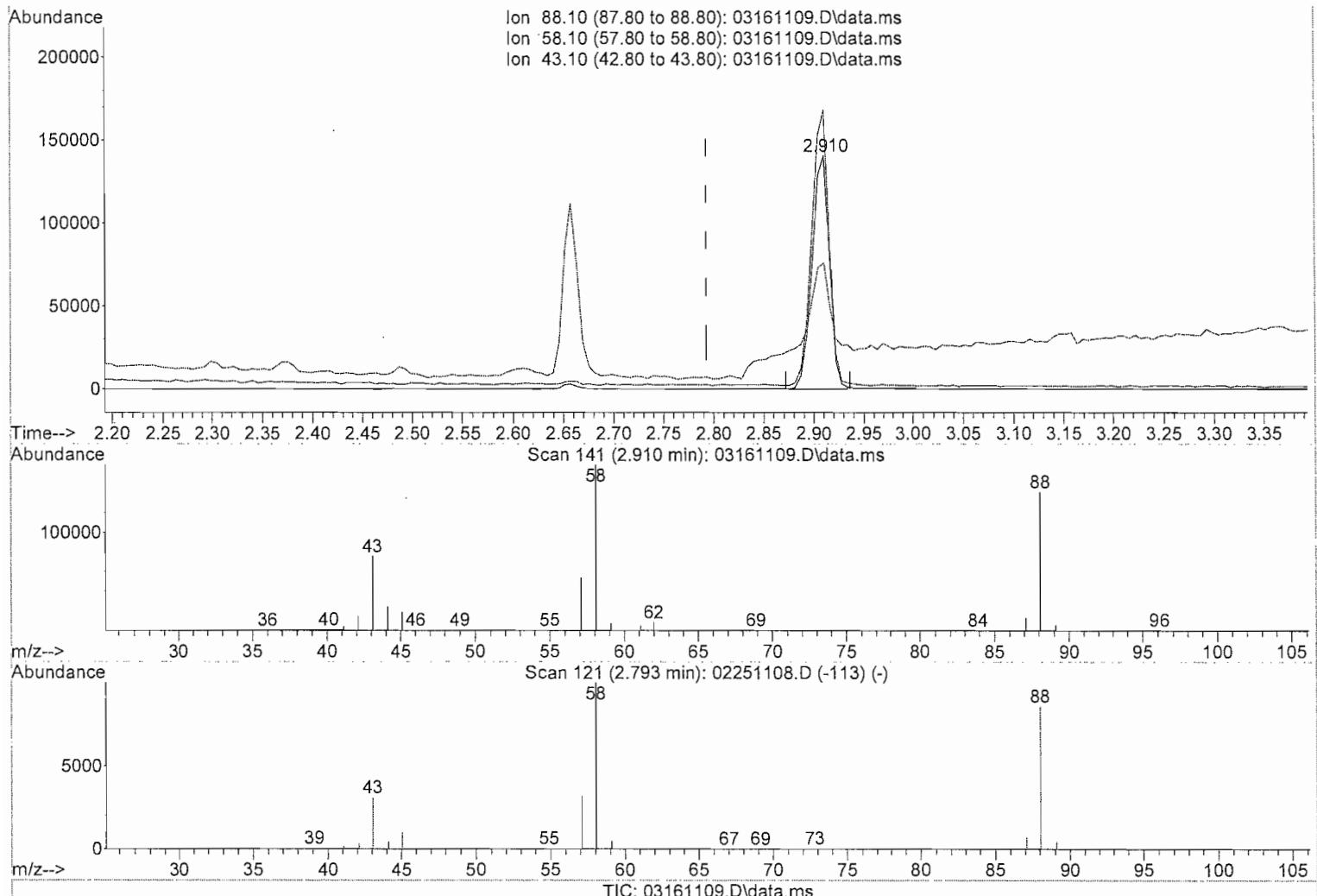
Ion	Exp%	Act%
88.10	100	0.00
58.10	112.80	0.00#
43.10	35.80	0.00#
0.00	0.00	0.00

3/18/11  
 3/21/11

## Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\Y  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.910min (+0.118) 20.88ug/mL m

response 172534

Ion	Exp%	Act%
88.10	100	100
58.10	112.80	119.81
43.10	35.80	41.38
0.00	0.00	0.00

3/17/11  
 3/21/11

Sample Name 11C0526-BS1  
 Data File Name 03161109.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 18:58  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	218822 ✓	205085	102542.5	410170	<-PASS
Internal Standard	RT ✓	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49	<-PASS

3/21/11

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:07:07 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	218822	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane-d8	2.85	96	162343m	✓12.89	ug/mL	

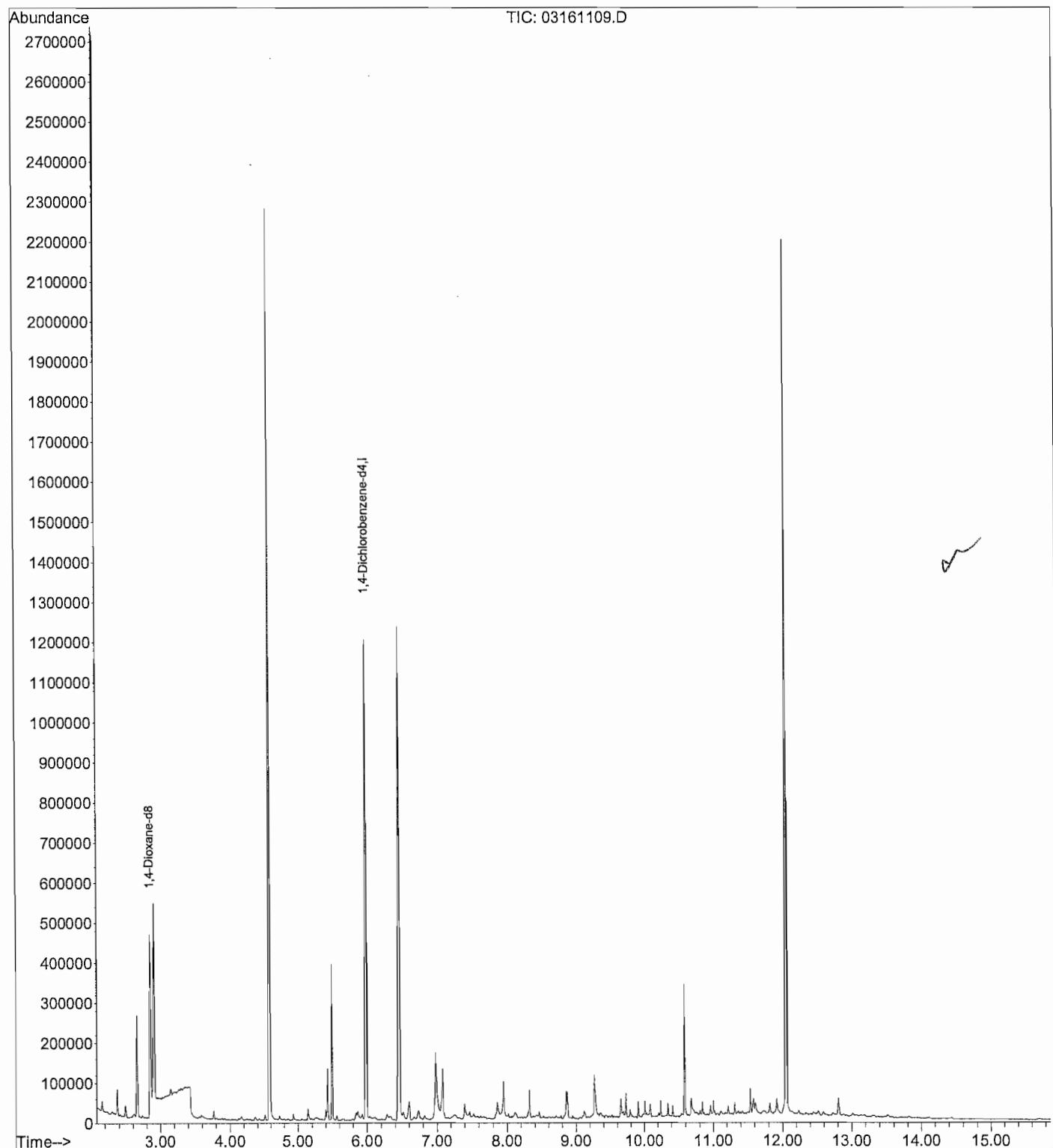
(#) = qualifier out of range (m) = manual integration (+) = signals summed

02/21/11

3/21/11

Data Path : N:\DATA\031611\  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

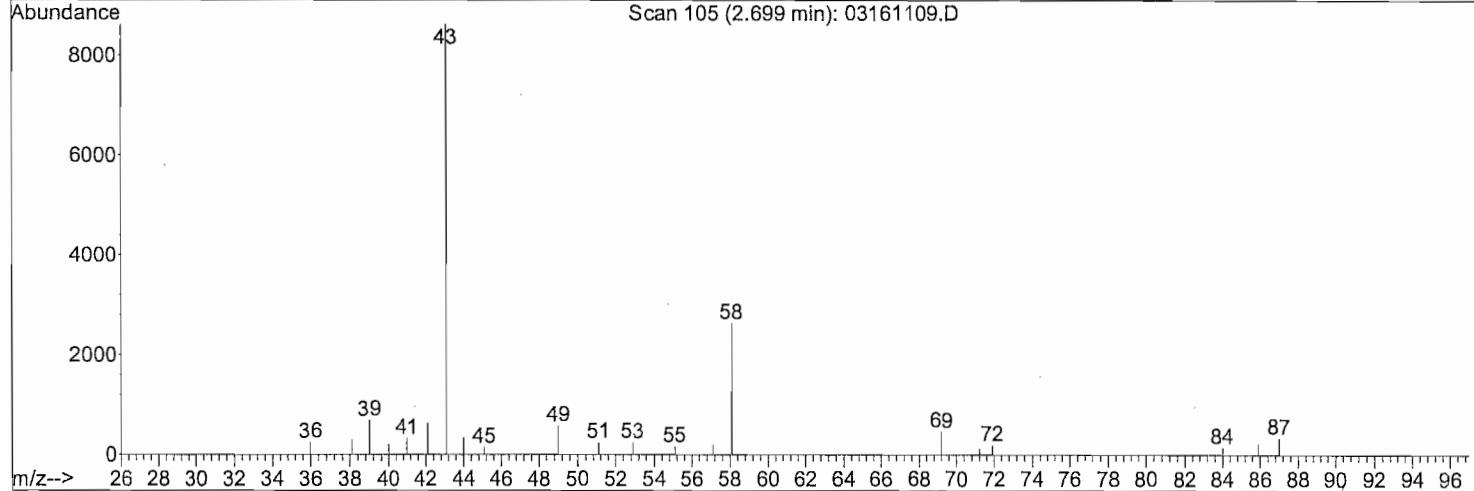
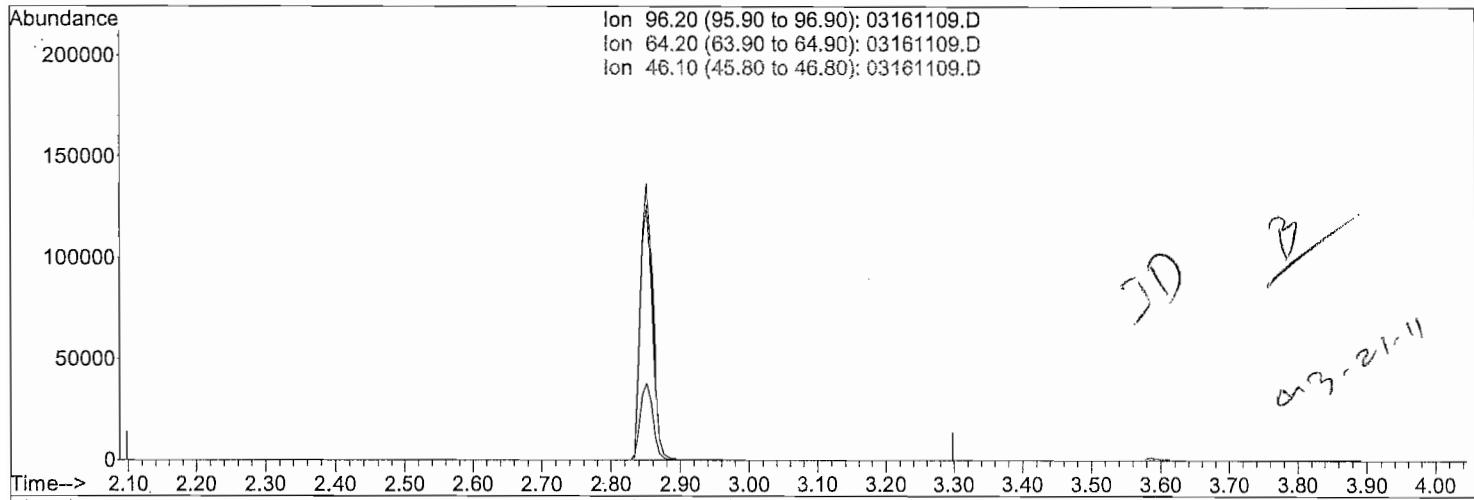
Quant Time: Mar 21 13:07:07 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:01:43 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161109.D

(2) 1,4-Dioxane-d8

2.698min (-2.698) 0.00ug/mL

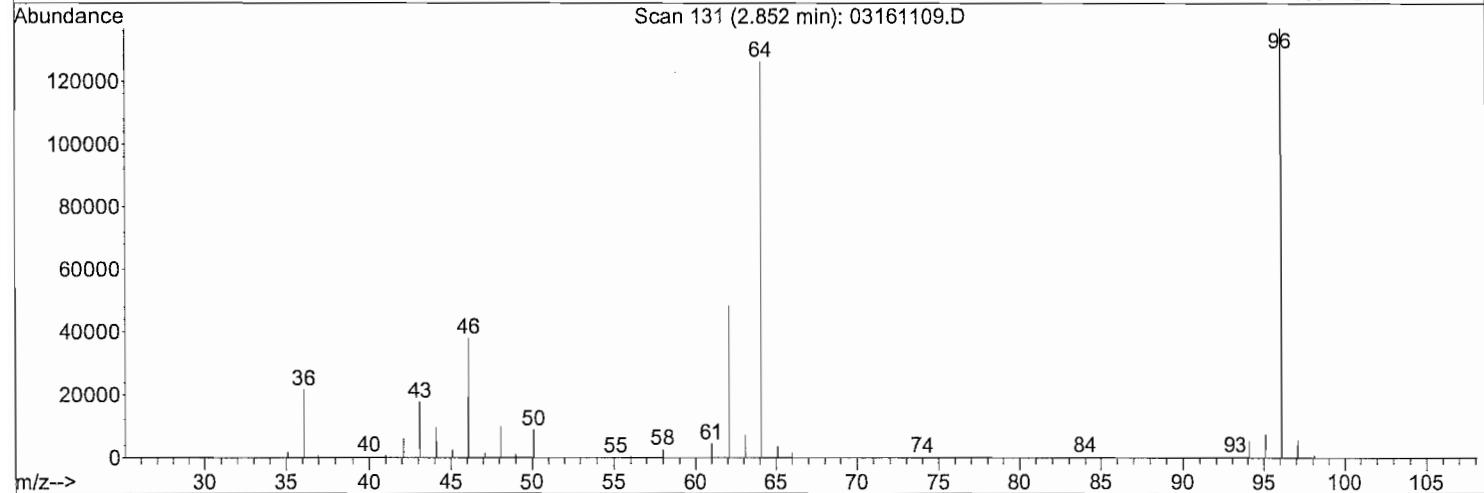
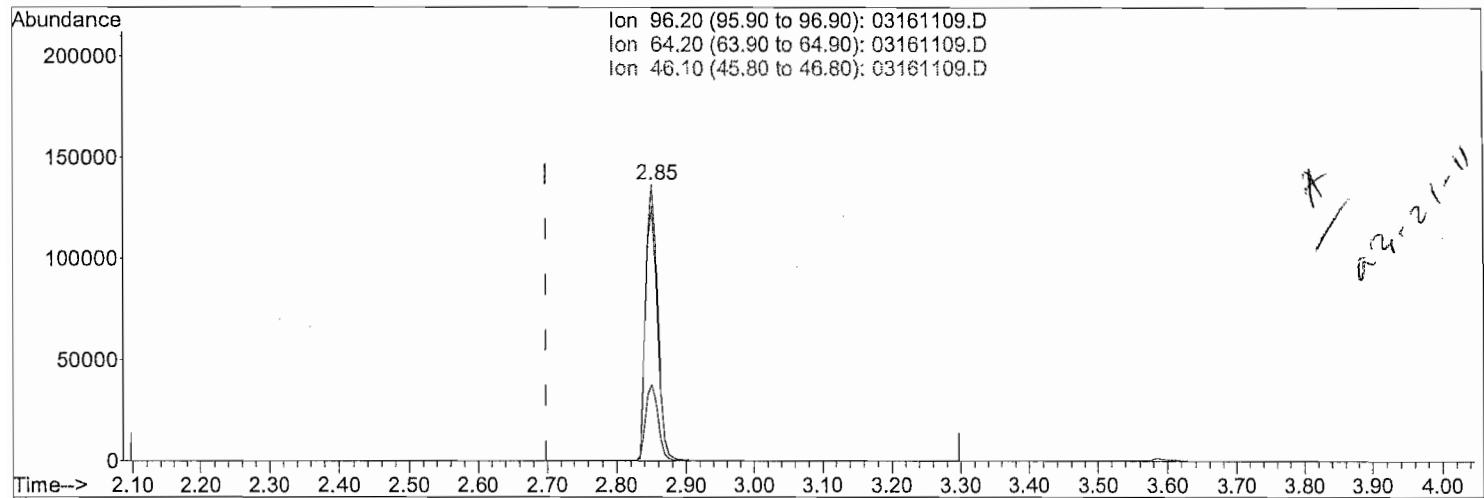
response 0

Ion	Exp%	Act%
96.20	100	0.00
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:01:43 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161109.D

(2) 1,4-Dioxane-d8

2.852min (+0.153) 12.89ug/mL m

response 162343

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	92.87
46.10	29.30	28.99
0.00	0.00	0.00

*M Shultz*

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\

Data File : 0316110.D

Acq On : 16 Mar 2011 7:24 pm

Operator : CL

Sample : 11C0526-BSD1

Misc :

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 17 10:06:20 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

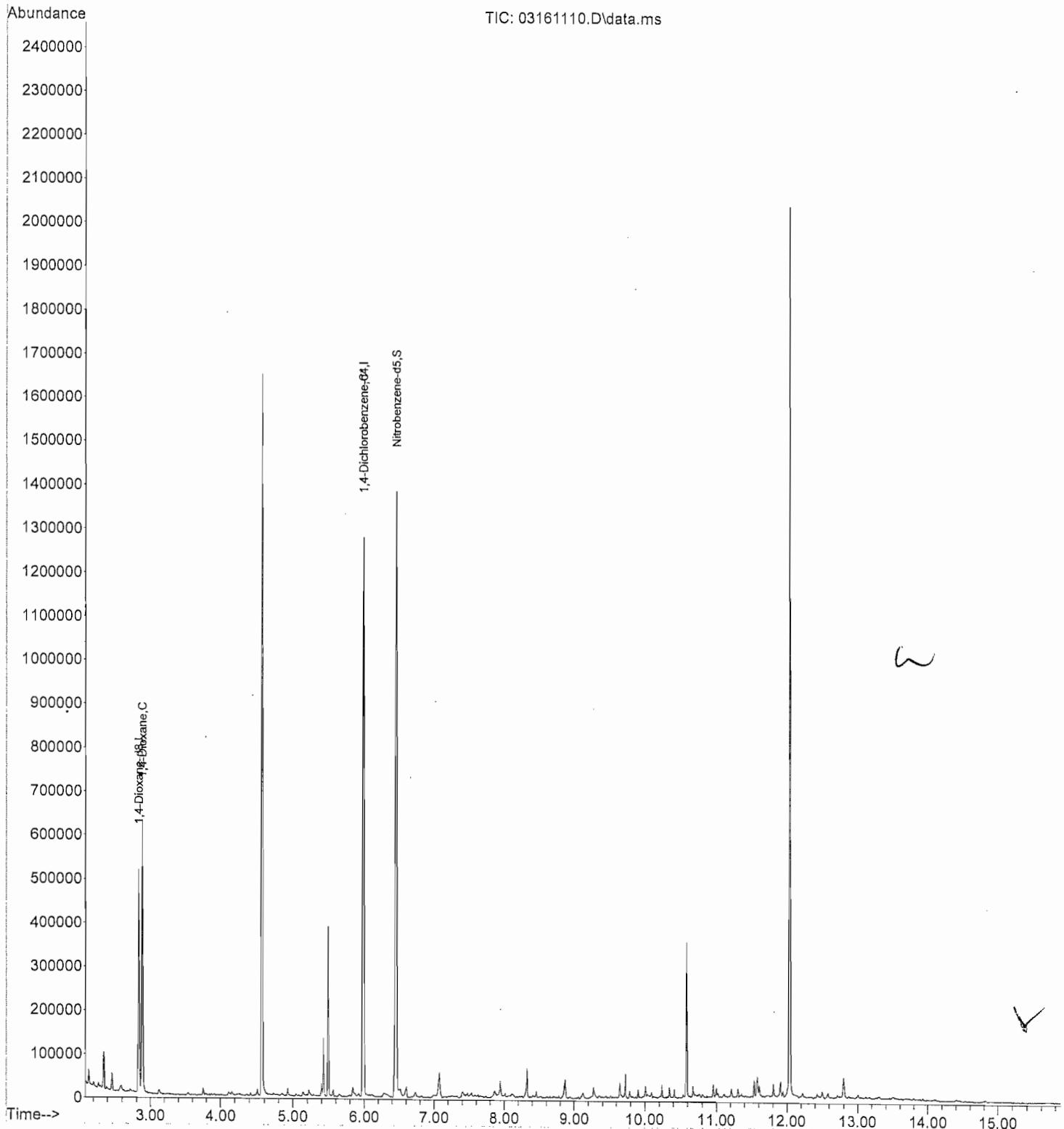
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.828	96	185840	20.00	ug/mL	0.08
3) 1,4-Dichlorobenzene-d4	5.993	152	227729	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.463	82	676248	16.57	ug/mL	-0.02
Target Compounds						
2) 1,4-Dioxane	2.881	88	196800	20.81	ug/mL	96
4) 1,4-Dichlorobenzene	5.998	146	583	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓  
3/11/11

Data Path : D:\msdchem\1\GCMS14\DATA\031611\Y  
Data File : 0316110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 17 10:06:20 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0526-BSD1  
 Data File Name 03161110.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 19:24  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	227729 ✓	205085	102542.5	410170 <-PASS	✓
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49 <-PASS	✓

3/21/11

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

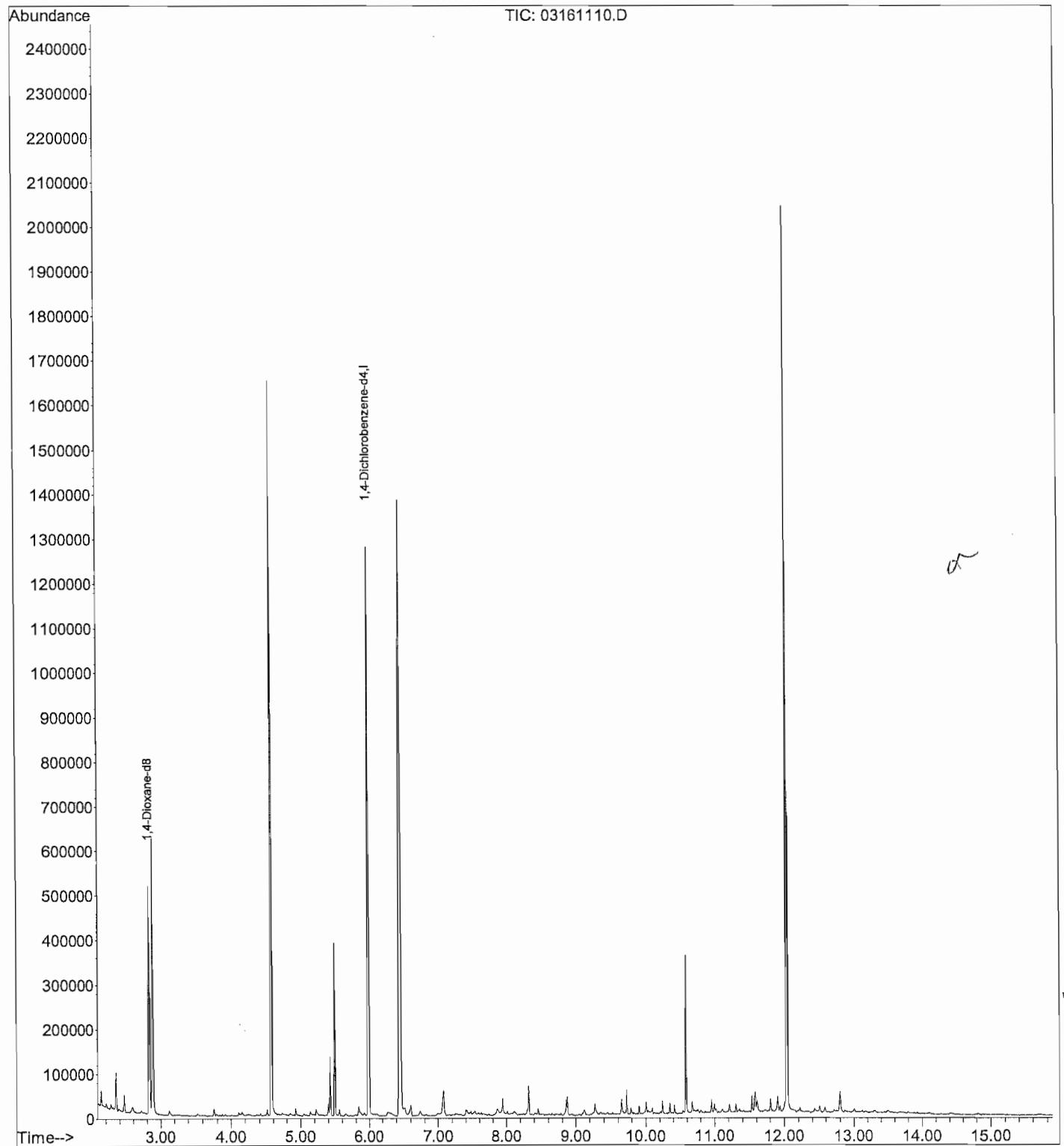
Quant Time: Mar 21 13:08:17 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	227729	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane-d8	2.83	96	185598m	14.16	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : N:\DATA\031611\  
Data File : 03161110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

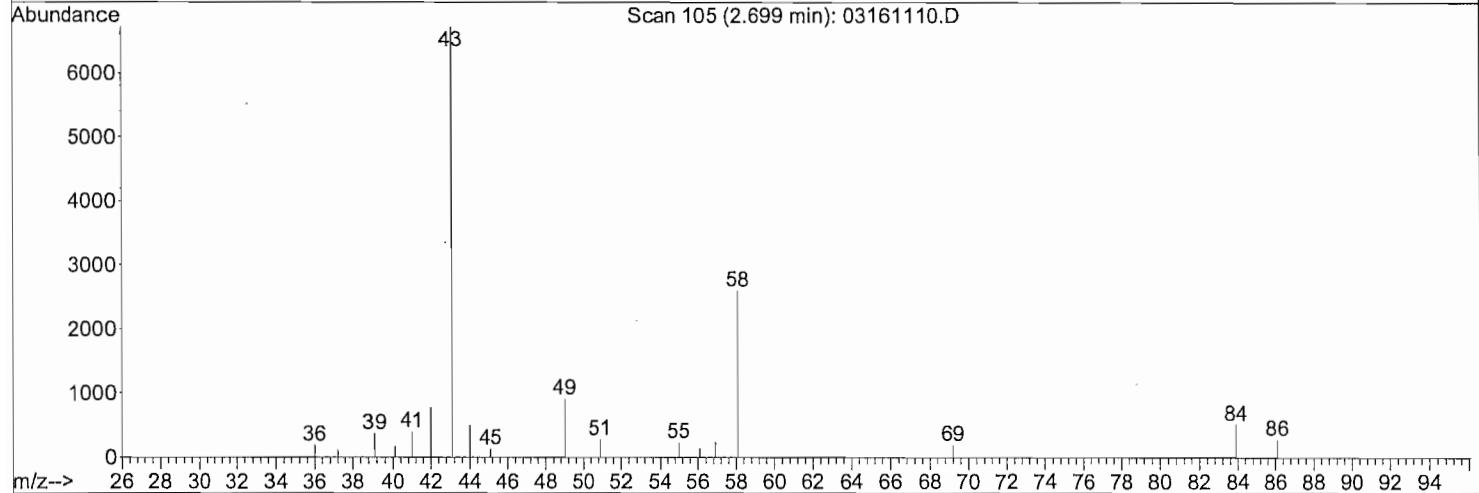
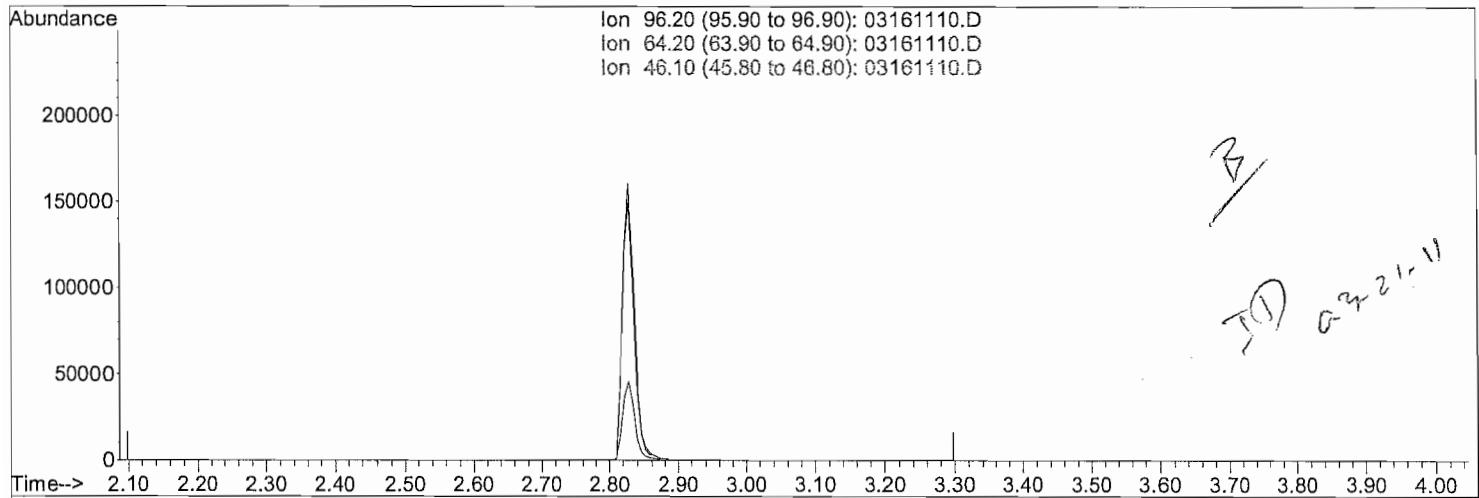
Quant Time: Mar 21 13:08:17 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161110.D  
 Acq On : 16 Mar 2011 7:24 pm  
 Operator : CL  
 Sample : 11C0526-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 13:01:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161110.D

(2) 1,4-Dioxane-d8

2.698min (-2.698) 0.00ug/mL

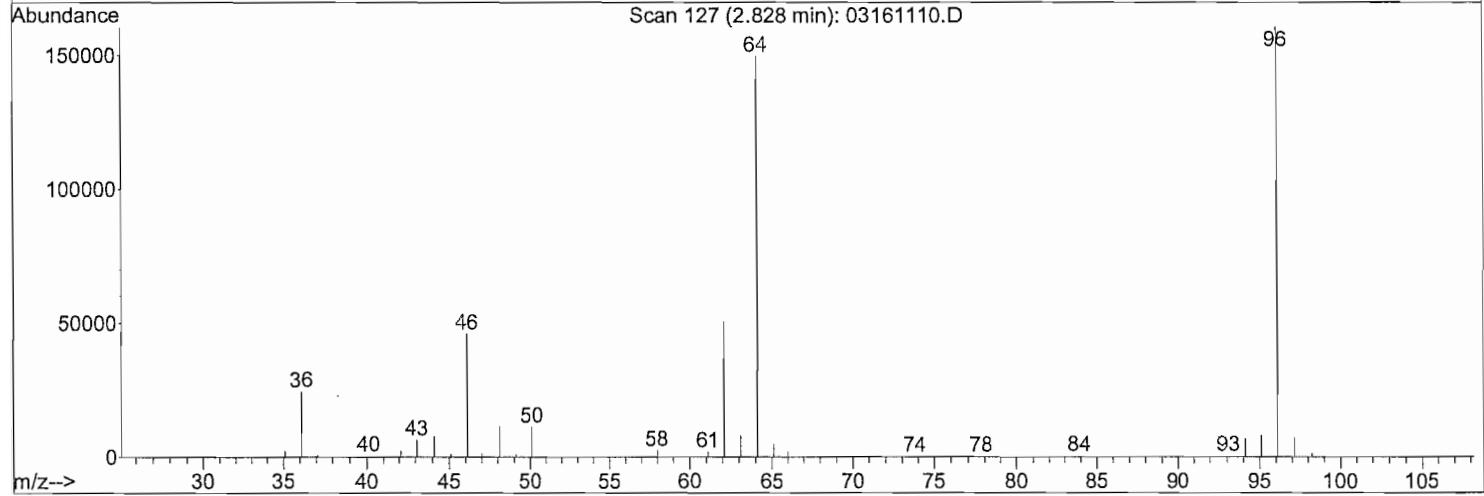
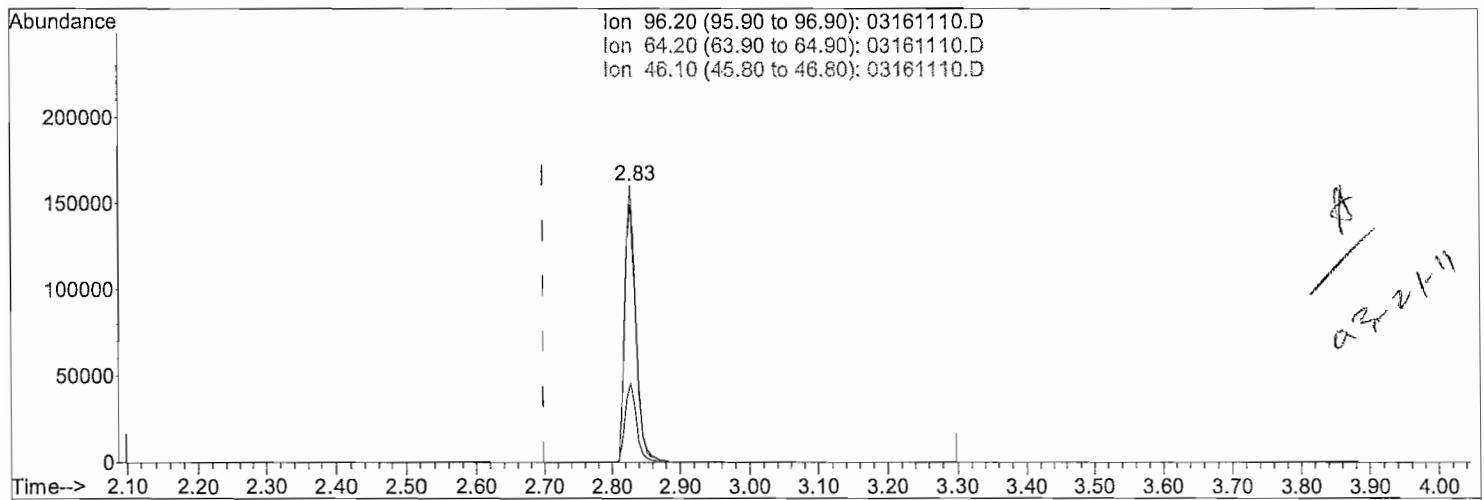
response 0

Ion	Exp%	Act%
96.20	100	0.00
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161110.D  
 Acq On : 16 Mar 2011 7:24 pm  
 Operator : CL  
 Sample : 11C0526-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 13:01:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161110.D

(2) 1,4-Dioxane-d8

2.828min (+0.130) 14.16ug/mL m

response 185598

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	92.28
46.10	29.30	29.37
0.00	0.00	0.00

V  
3/21/11

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 0316111.D  
 Acq On : 16 Mar 2011 7:51 pm  
 Operator : CL  
 Sample : PUC0730-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 17 10:06:25 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

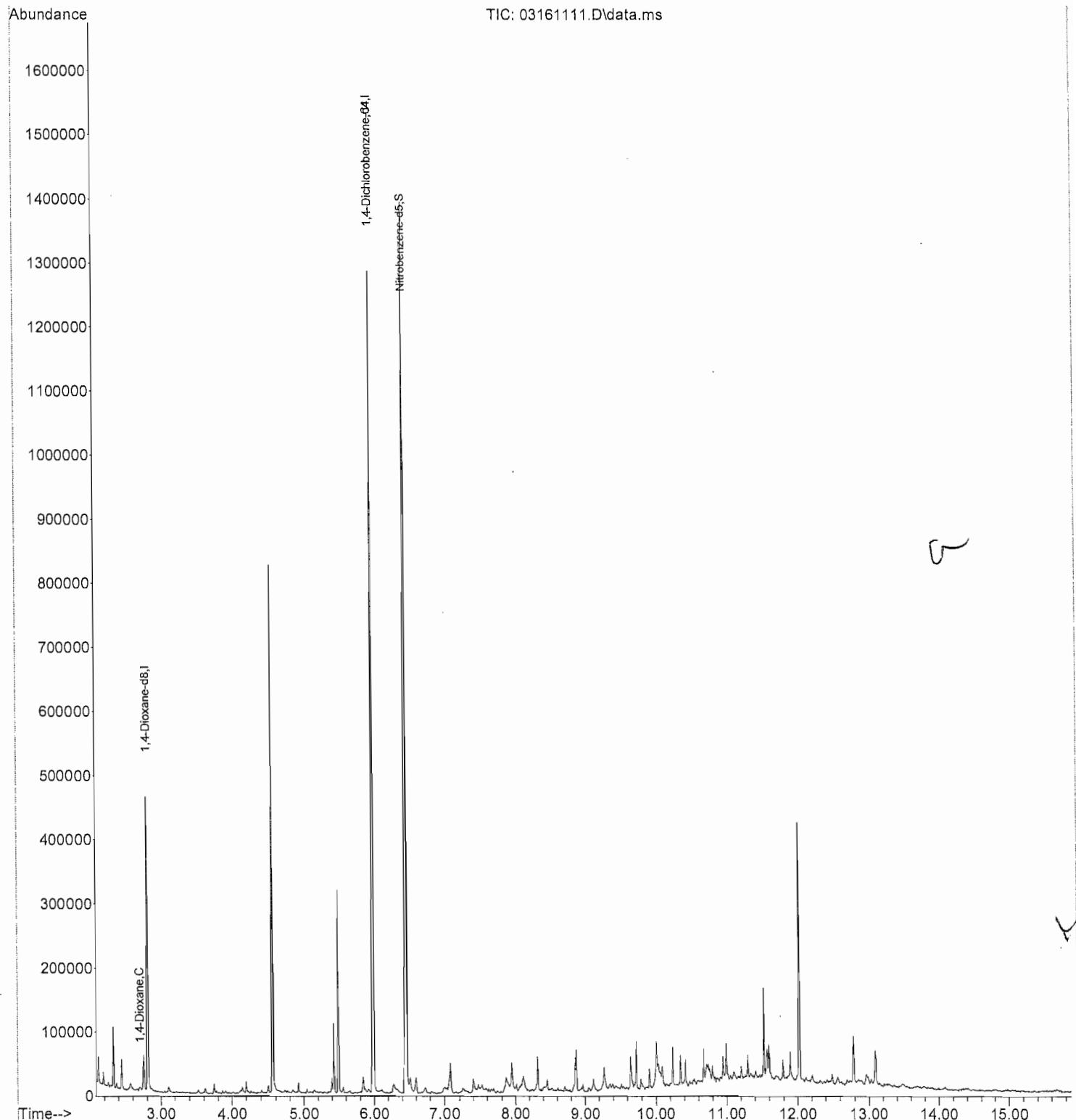
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.804	96	172035	20.00	ug/mL	0.06
3) 1,4-Dichlorobenzene-d4	5.992	152	227256	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.463	82	647579	15.90	ug/mL	-0.02
Target Compounds						
2) 1,4-Dioxane	2.698	88	59	0.01	ug/mL#	1
4) 1,4-Dichlorobenzene	5.998	146	613	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11

Data Path : D:\msdchem\1\GCMS14\DATA\031611\Y  
Data File : 0316111.D  
Acq On : 16 Mar 2011 7:51 pm  
Operator : CL  
Sample : PUC0730-01  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 17 10:06:25 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name PUC0730-01  
 Data File Name 03161111.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 19:51  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	<b>SAMPLE RESPONSE</b>	<b>CCV RESPONSE</b>	0.5X	2X	<b>PASS/FAIL</b>
Internal Standard					
1,4-Dichlorobenzene-d4	227256	205085	102542.5	410170	<-PASS ✓
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS ✓

3/17/11

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161111.D  
Acq On : 16 Mar 2011 7:51 pm  
Operator : CL  
Sample : PUC0730-01  
Misc. :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 13:08:53 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	227256	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane-d8	2.80	96	170851m	13.06	ug/mL	

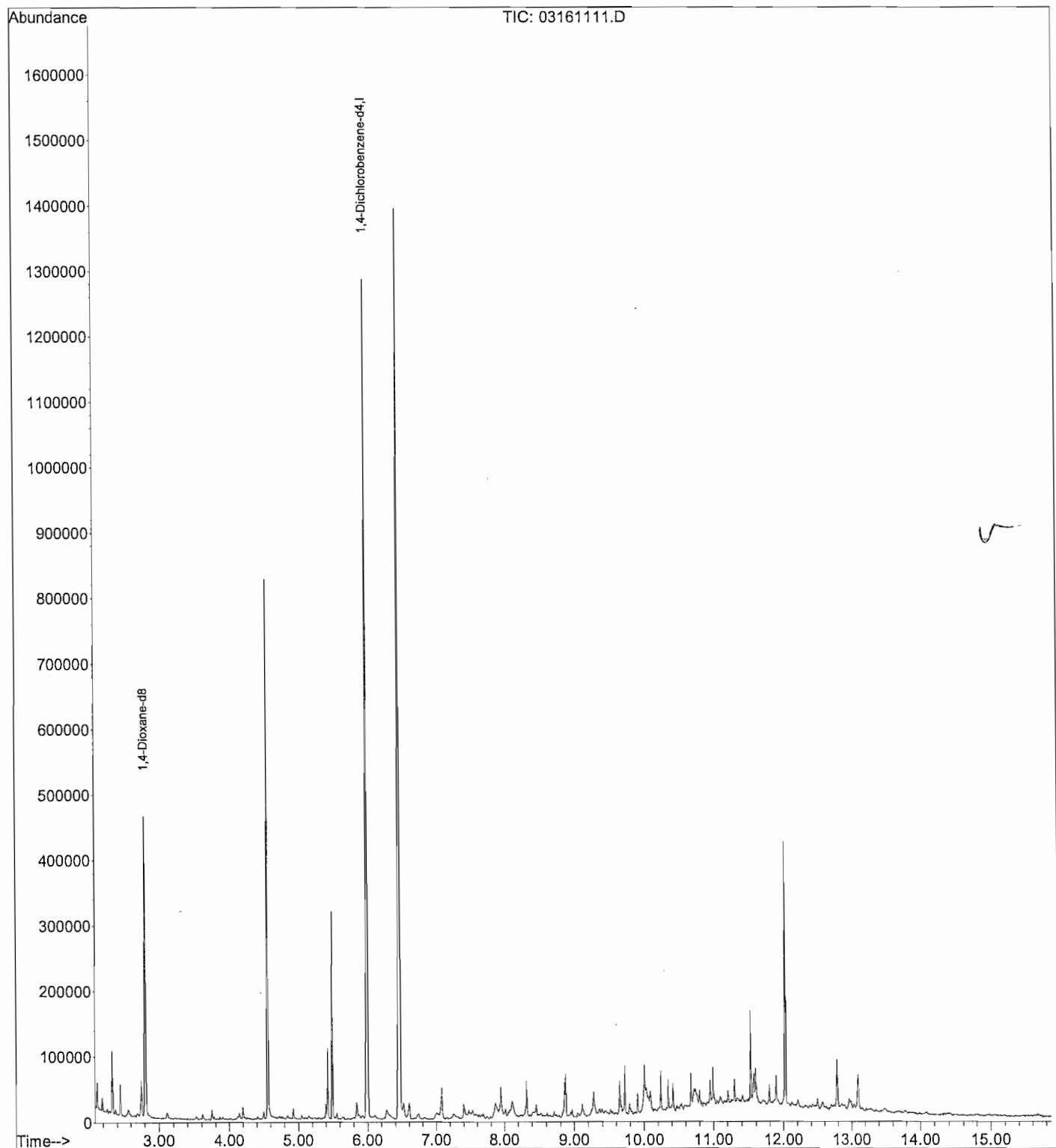
(#) = qualifier out of range (m) = manual integration (+) = signals summed

03/21/11

3/21/11

Data Path : N:\DATA\031611\  
Data File : 03161111.D  
Acq On : 16 Mar 2011 7:51 pm  
Operator : CL  
Sample : PUC0730-01  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

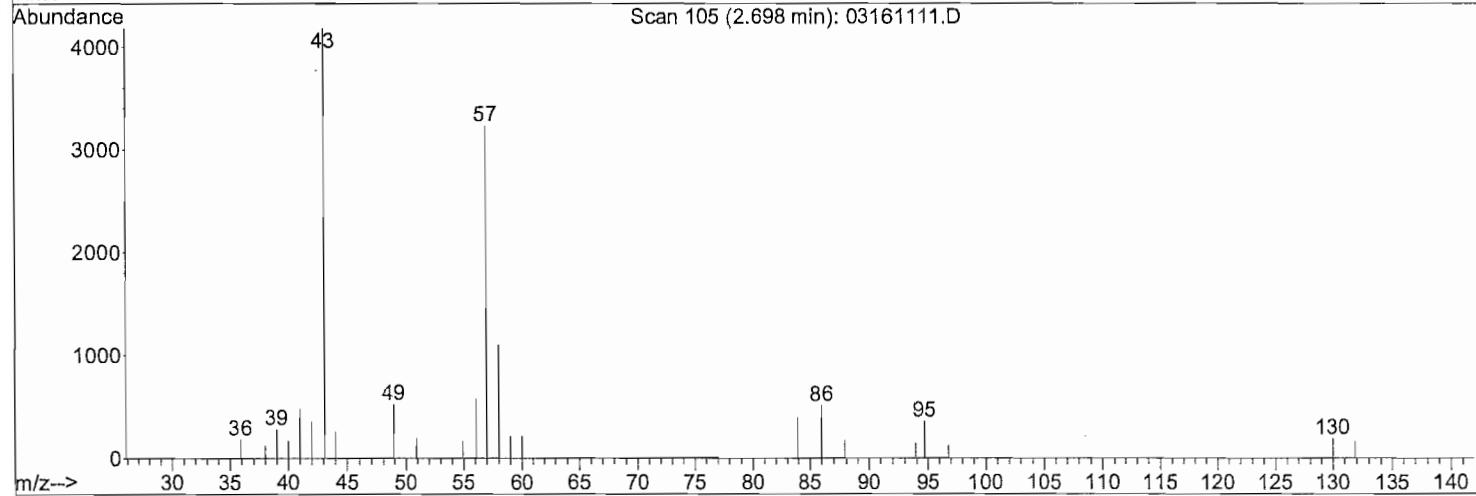
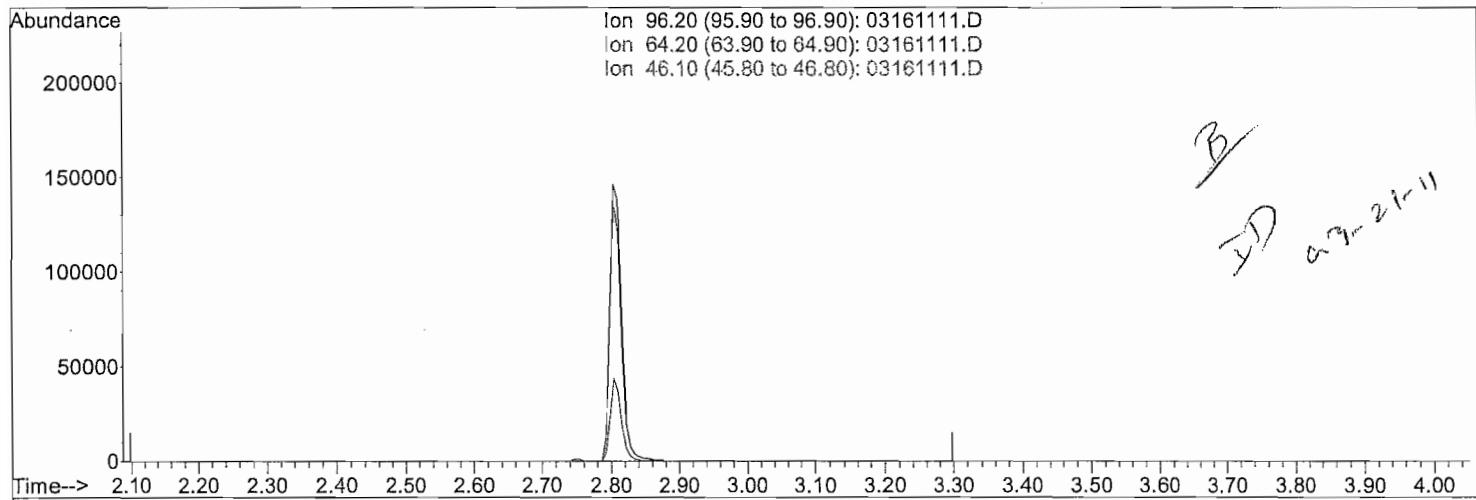
Quant Time: Mar 21 13:08:53 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161111.D  
 Acq On : 16 Mar 2011 7:51 pm  
 Operator : CL  
 Sample : PUC0730-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 13:01:52 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161111.D

(2) 1,4-Dioxane-d8

2.698min (-2.698) 0.00ug/mL

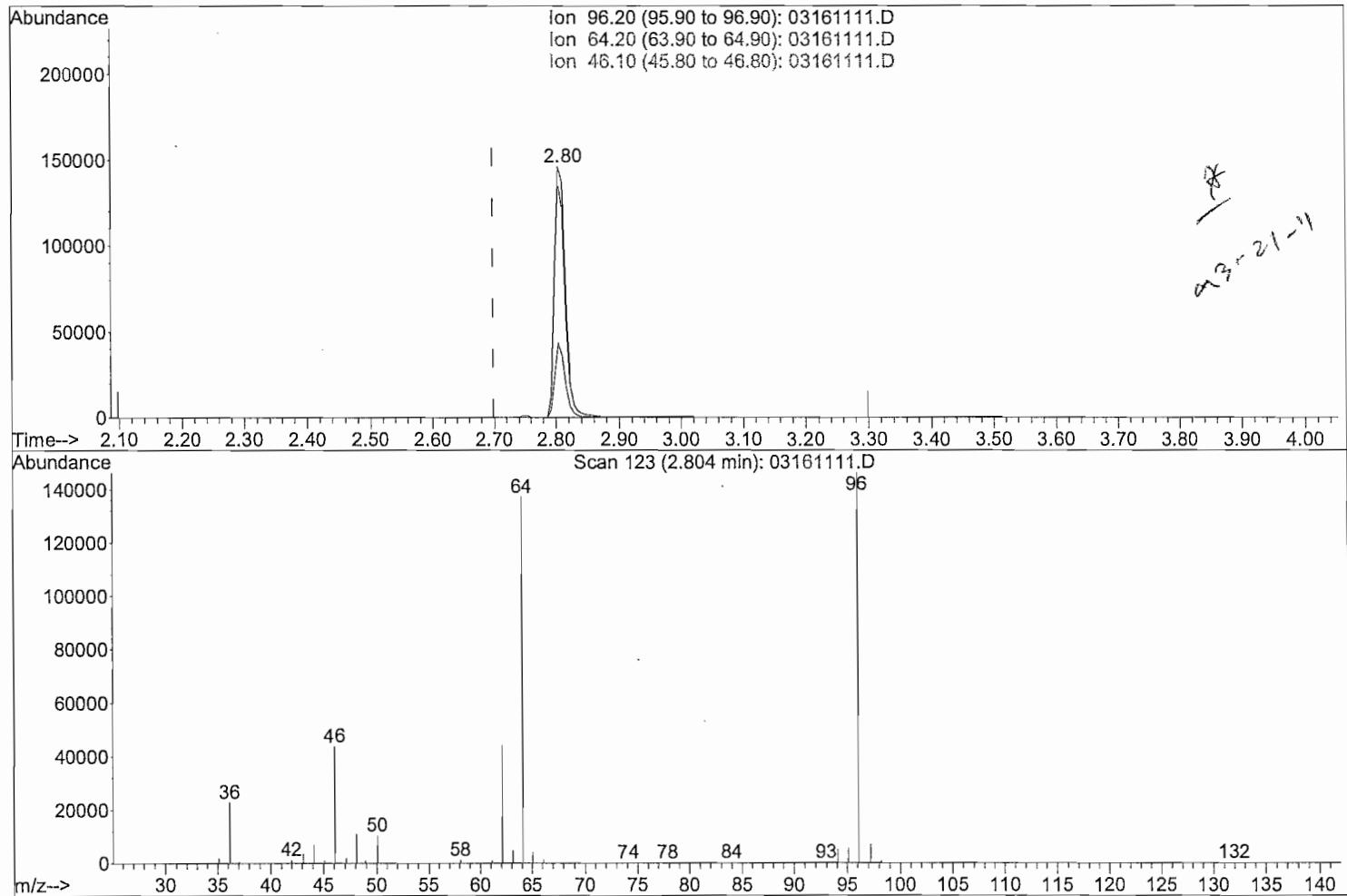
response 0

Ion	Exp%	Act%
96.20	100	0.00
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161111.D  
 Acq On : 16 Mar 2011 7:51 pm  
 Operator : CL  
 Sample : PUC0730-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 13:01:52 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161111.D

(2) 1,4-Dioxane-d8

2.804min (+0.106) 13.06ug/mL m

response 170851

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	91.16
46.10	29.30	28.30
0.00	0.00	0.00



### **Level III Data Package**

Environmental Resources Management Inc.

### **TestAmerica Work Order Number:**

PUC0829

### **Prepared for:**

Jason Hilker  
Environmental Resources Management, Inc.  
7272 East Indian School Road, Suite 100  
Scottsdale, AZ 85251



## QA/QC DATA PACKAGE: LEVEL III

### TABLE SUMMARY

	Page Number
CASE NARRATIVE.....	3
CHAIN OF CUSTODY.....	4-5
ANALYTICAL REPORTS.....	6-9
QUALITY CONTROL SUMMARIES.....	10-24
METHOD 8260	
CALIBRATION DATA.....	25-131
ANALYTICAL DATA.....	132-188
METHOD MODIFIED 8270C (1,4-DIOXANE)	
DIGESTION and/or EXTRACTION.....	189-191
CALIBRATION DATA.....	192-233
ANALYTICAL DATA.....	234-280

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd, Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

## LABORATORY REPORT

Prepared For: Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251

Attention: Jason Hilker

Project: 0096498.009

Sampled: 03/11/11

Received: 03/11/11

Issued: 03/22/11 06:26

NELAP #01109CA Arizona DHS#AZ0728

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.*

*This entire report was reviewed and approved for release.*

## CASE NARRATIVE

### LABORATORY ID

PUC0829-01

### CLIENT ID

OU3-8M2-M-031111

### MATRIX

Water

SAMPLE RECEIPT: Samples were received intact, at 4°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.  
N1-The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).  
R1-The RPD exceeded the acceptance limit.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Kylie Emily  
Project Manager

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

CHAIN OF CUSTODY FORMS

# TestAmerica

**THE LEADER IN ENVIRONMENTAL TESTING**  
TAL-0013-50 (10/10)

## CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 138, Phoenix, AZ 85040 (602) 457-3340 FAX (602) 454-9303  
 [ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803  
 [ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Analysis Required									
Project / PO Number: 00 96498.004									
Client Name/Address: ERA		Phone Number: 480 ~ 998-2401		Sampling Date: 3/10/11		Sampling Time: 15:00		Preservatives: HCl	
7777 E. Indian School Rd Scottsdale, AZ, 85251		Fax Number: 440-998-2106		# of Cont. 3		-		X	
Project Manager: Jason Miller		Sample Matrix: W		Container Type: HDPE					
Send Report to: Jason.Miller@ERAn.com		Sample Description: 003-8M2-M-031111		# of Cont. 1L					
Sampler: Adam Neagle									
1.4-Dioxane Only VOL (8270C) (8260B)									
LEVEL 3									
Received By: <u>John Penn</u> Date / Time: <u>3/11/11 6:22</u> Relinquished By: _____ Date / Time: _____ Relinquished By: _____ Date / Time: _____ Relinquished By: _____ Date / Time: _____									
Turnaround Time: (Check) same day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> 5 days <input type="checkbox"/> 48 hours <input type="checkbox"/> normal <input checked="" type="checkbox"/>									
Sample Integrity: (Check) intact <input type="checkbox"/> on ice <input checked="" type="checkbox"/>									
Received in Lab By: <u>John Penn</u> Date / Time: <u>3/11/11 16:22</u>									

By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project.  
 Payment for services is due within 30 days from the date of invoice. Samples(s) will be disposed of after 30 days.

5 of 280

3.8° C ✓

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

ANALYTICAL REPORTS

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

 Sampled: 03/11/11  
 Received: 03/11/11

## VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC0829-01 (OU3-8M2-M-031111 - Water)</b>								
<b>Reporting Units: ug/l</b>								
Acetone	EPA 8260B	11C0694	10	ND	1	3/18/2011	3/18/2011	
Benzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Bromobenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Bromoform	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Bromomethane	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
2-Butanone (MEK)	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
n-Butylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
sec-Butylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
tert-Butylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Carbon disulfide	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Carbon tetrachloride	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Chlorobenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Chloroethane	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
Chloroform	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Chloromethane	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
2-Chlorotoluene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
4-Chlorotoluene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Dibromochloromethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2-Dibromo-3-chloropropane	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
1,2-Dibromoethane (EDB)	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Dibromomethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2-Dichlorobenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,3-Dichlorobenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,4-Dichlorobenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Dichlorodifluoromethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,1-Dichloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2-Dichloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,1-Dichloroethene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
cis-1,2-Dichloroethene	EPA 8260B	11C0694	0.50	3.6	1	3/18/2011	3/18/2011	
trans-1,2-Dichloroethene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2-Dichloropropane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,3-Dichloropropane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
2,2-Dichloropropane	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
1,1-Dichloropropene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
cis-1,3-Dichloropropene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
trans-1,3-Dichloropropene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Ethylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Hexachlorobutadiene	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PUC0829 <Page 7 of 280

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009  
 Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

## VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC0829-01 (OU3-8M2-M-031111 - Water) - cont.</b>								
<b>Reporting Units: ug/l</b>								
2-Hexanone	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
Iodomethane	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
Isopropylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
p-Isopropyltoluene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Methylene Chloride	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Naphthalene	EPA 8260B	11C0694	2.5	ND	1	3/18/2011	3/18/2011	
n-Propylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Styrene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,1,1,2-Tetrachloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,1,2,2-Tetrachloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
<b>Tetrachloroethene</b>	EPA 8260B	11C0694	0.50	<b>0.97</b>	1	3/18/2011	3/18/2011	
Toluene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2,3-Trichlorobenzene	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
1,2,4-Trichlorobenzene	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
1,1,1-Trichloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,1,2-Trichloroethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
<b>Trichloroethene</b>	EPA 8260B	11C0694	0.50	<b>29</b>	1	3/18/2011	3/18/2011	
Trichlorofluoromethane	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,2,3-Trichloropropane	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
1,2,4-Trimethylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
1,3,5-Trimethylbenzene	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Vinyl Acetate	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
Vinyl chloride	EPA 8260B	11C0694	0.50	ND	1	3/18/2011	3/18/2011	
Xylenes, Total	EPA 8260B	11C0694	1.0	ND	1	3/18/2011	3/18/2011	
Freon 113	EPA 8260B	11C0694	2.0	ND	1	3/18/2011	3/18/2011	
<i>Surrogate: Dibromofluoromethane (70-130%)</i>								
87 %								
<i>Surrogate: Toluene-d8 (70-130%)</i>								
86 %								
<i>Surrogate: 4-Bromofluorobenzene (70-130%)</i>								
84 %								

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC0829-01 (OU3-8M2-M-031111 - Water)</b>								
Reporting Units: ug/l								
1,4-Dioxane	SW8270C	11C0526	1.0	ND	1	3/14/2011	3/17/2011	
				70 %				
				79 %				

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PUC0829 <Page 9 of 280

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

## QUALITY CONTROL SUMMARIES

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>Blank Analyzed: 03/18/2011 (11C0694-BLK1)</b>										
Acetone	ND	10	ug/l							
Benzene	ND	0.50	ug/l							
Bromobenzene	ND	0.50	ug/l							
Bromochloromethane	ND	0.50	ug/l							
Bromodichloromethane	ND	0.50	ug/l							
Bromoform	ND	1.0	ug/l							
Bromomethane	ND	1.0	ug/l							
2-Butanone (MEK)	ND	2.5	ug/l							
n-Butylbenzene	ND	0.50	ug/l							
sec-Butylbenzene	ND	0.50	ug/l							
tert-Butylbenzene	ND	0.50	ug/l							
Carbon disulfide	ND	0.50	ug/l							
Carbon tetrachloride	ND	0.50	ug/l							
Chlorobenzene	ND	0.50	ug/l							
Chloroethane	ND	1.0	ug/l							
Chloroform	ND	0.50	ug/l							
Chloromethane	ND	1.0	ug/l							
2-Chlorotoluene	ND	0.50	ug/l							
4-Chlorotoluene	ND	0.50	ug/l							
Dibromochloromethane	ND	0.50	ug/l							
1,2-Dibromo-3-chloropropane	ND	2.5	ug/l							
1,2-Dibromoethane (EDB)	ND	0.50	ug/l							
Dibromomethane	ND	0.50	ug/l							
1,2-Dichlorobenzene	ND	0.50	ug/l							
1,3-Dichlorobenzene	ND	0.50	ug/l							
1,4-Dichlorobenzene	ND	0.50	ug/l							
Dichlorodifluoromethane	ND	0.50	ug/l							
1,1-Dichloroethane	ND	0.50	ug/l							
1,2-Dichloroethane	ND	0.50	ug/l							
1,1-Dichloroethene	ND	0.50	ug/l							
cis-1,2-Dichloroethene	ND	0.50	ug/l							
trans-1,2-Dichloroethene	ND	0.50	ug/l							
1,2-Dichloropropane	ND	0.50	ug/l							
1,3-Dichloropropane	ND	0.50	ug/l							
2,2-Dichloropropane	ND	1.0	ug/l							

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Kylie Emily  
Project Manager

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PUC0829 <1 11 of 280

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>Blank Analyzed: 03/18/2011 (11C0694-BLK1)</b>										
1,1-Dichloropropene	ND	0.50	ug/l							
cis-1,3-Dichloropropene	ND	0.50	ug/l							
trans-1,3-Dichloropropene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Hexachlorobutadiene	ND	1.0	ug/l							
2-Hexanone	ND	2.5	ug/l							
Iodomethane	ND	2.5	ug/l							
Isopropylbenzene	ND	0.50	ug/l							
p-Isopropyltoluene	ND	0.50	ug/l							
Methylene Chloride	ND	1.0	ug/l							
4-Methyl-2-pentanone (MIBK)	ND	2.5	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	ug/l							
Naphthalene	ND	2.5	ug/l							
n-Propylbenzene	ND	0.50	ug/l							
Styrene	ND	0.50	ug/l							
1,1,1,2-Tetrachloroethane	ND	0.50	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	ug/l							
Tetrachloroethene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
1,2,3-Trichlorobenzene	ND	1.0	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	ug/l							
1,1,1-Trichloroethane	ND	0.50	ug/l							
1,1,2-Trichloroethane	ND	0.50	ug/l							
Trichloroethene	ND	0.50	ug/l							
Trichlorofluoromethane	ND	0.50	ug/l							
1,2,3-Trichloropropane	ND	1.0	ug/l							
1,2,4-Trimethylbenzene	ND	0.50	ug/l							
1,3,5-Trimethylbenzene	ND	0.50	ug/l							
Vinyl Acetate	ND	1.0	ug/l							
Vinyl chloride	ND	0.50	ug/l							
Xylenes, Total	ND	1.0	ug/l							
Freon 113	ND	2.0	ug/l							
<i>Surrogate: Dibromofluoromethane</i>	21.4		ug/l	25.0		85	70-130			
<i>Surrogate: Toluene-d8</i>	21.4		ug/l	25.0		86	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	20.6		ug/l	25.0		83	70-130			

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

### METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>LCS Analyzed: 03/18/2011 (11C0694-BS1)</b>										
Acetone	29.0	10	ug/l	25.0		116	30-150			
Benzene	20.5	0.50	ug/l	25.0		82	70-130			
Bromobenzene	23.0	0.50	ug/l	25.0		92	70-130			
Bromochloromethane	20.7	0.50	ug/l	25.0		83	70-130			
Bromodichloromethane	21.9	0.50	ug/l	25.0		88	70-130			
Bromoform	22.6	1.0	ug/l	25.0		91	67-122			
Bromomethane	20.6	1.0	ug/l	25.0		83	64-132			
2-Butanone (MEK)	24.1	2.5	ug/l	25.0		97	48-150			
n-Butylbenzene	23.2	0.50	ug/l	25.0		93	70-130			
sec-Butylbenzene	22.4	0.50	ug/l	25.0		90	70-130			
tert-Butylbenzene	22.5	0.50	ug/l	25.0		90	70-130			
Carbon disulfide	24.2	0.50	ug/l	25.0		97	61-126			
Carbon tetrachloride	22.1	0.50	ug/l	25.0		88	70-130			
Chlorobenzene	21.6	0.50	ug/l	25.0		87	70-130			
Chloroethane	21.2	1.0	ug/l	25.0		85	69-128			
Chloroform	19.9	0.50	ug/l	25.0		80	70-130			
Chloromethane	22.1	1.0	ug/l	25.0		88	56-131			
2-Chlorotoluene	21.8	0.50	ug/l	25.0		87	70-130			
4-Chlorotoluene	22.9	0.50	ug/l	25.0		92	70-130			
Dibromochloromethane	21.7	0.50	ug/l	25.0		87	70-130			
1,2-Dibromo-3-chloropropane	23.7	2.5	ug/l	25.0		95	63-129			
1,2-Dibromoethane (EDB)	22.1	0.50	ug/l	25.0		88	70-130			
Dibromomethane	21.2	0.50	ug/l	25.0		85	70-130			
1,2-Dichlorobenzene	22.0	0.50	ug/l	25.0		88	70-130			
1,3-Dichlorobenzene	22.2	0.50	ug/l	25.0		89	70-130			
1,4-Dichlorobenzene	22.2	0.50	ug/l	25.0		89	70-130			
Dichlorodifluoromethane	21.2	0.50	ug/l	25.0		85	42-150			
1,1-Dichloroethane	20.2	0.50	ug/l	25.0		81	70-130			
1,2-Dichloroethane	20.2	0.50	ug/l	25.0		81	72-133			
1,1-Dichloroethene	20.5	0.50	ug/l	25.0		82	70-130			
cis-1,2-Dichloroethene	20.0	0.50	ug/l	25.0		80	70-130			
trans-1,2-Dichloroethene	20.8	0.50	ug/l	25.0		83	70-130			
1,2-Dichloropropane	21.3	0.50	ug/l	25.0		85	70-130			
1,3-Dichloropropane	21.3	0.50	ug/l	25.0		85	70-130			
2,2-Dichloropropane	21.3	1.0	ug/l	25.0		85	70-130			

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>LCS Analyzed: 03/18/2011 (11C0694-BS1)</b>										
1,1-Dichloropropene	21.8	0.50	ug/l	25.0		87	70-130			
cis-1,3-Dichloropropene	21.8	0.50	ug/l	25.0		87	70-130			
trans-1,3-Dichloropropene	22.8	0.50	ug/l	25.0		91	70-130			
Ethylbenzene	21.9	0.50	ug/l	25.0		88	70-130			
Hexachlorobutadiene	23.6	1.0	ug/l	25.0		95	70-130			
2-Hexanone	25.9	2.5	ug/l	25.0		104	44-150			
Iodomethane	24.7	2.5	ug/l	25.0		99	58-138			
Isopropylbenzene	24.7	0.50	ug/l	25.0		99	70-130			
p-Isopropyltoluene	22.9	0.50	ug/l	25.0		92	70-130			
Methylene Chloride	20.4	1.0	ug/l	25.0		82	70-130			
4-Methyl-2-pentanone (MIBK)	23.7	2.5	ug/l	25.0		95	61-142			
Methyl-tert-butyl Ether (MTBE)	19.4	0.50	ug/l	25.0		77	70-130			
Naphthalene	23.1	2.5	ug/l	25.0		93	65-129			
n-Propylbenzene	23.4	0.50	ug/l	25.0		94	70-130			
Styrene	22.7	0.50	ug/l	25.0		91	70-130			
1,1,1,2-Tetrachloroethane	21.8	0.50	ug/l	25.0		87	70-130			
1,1,2,2-Tetrachloroethane	22.8	0.50	ug/l	25.0		91	70-130			
Tetrachloroethene	21.7	0.50	ug/l	25.0		87	70-130			
Toluene	21.6	0.50	ug/l	25.0		86	70-130			
1,2,3-Trichlorobenzene	23.4	1.0	ug/l	25.0		94	70-130			
1,2,4-Trichlorobenzene	24.1	1.0	ug/l	25.0		96	70-130			
1,1,1-Trichloroethane	21.2	0.50	ug/l	25.0		85	70-130			
1,1,2-Trichloroethane	21.5	0.50	ug/l	25.0		86	70-130			
Trichloroethene	21.3	0.50	ug/l	25.0		85	70-130			
Trichlorofluoromethane	19.5	0.50	ug/l	25.0		78	78-149			
1,2,3-Trichloropropane	24.0	1.0	ug/l	25.0		96	70-130			
1,2,4-Trimethylbenzene	23.3	0.50	ug/l	25.0		93	70-130			
1,3,5-Trimethylbenzene	23.2	0.50	ug/l	25.0		93	70-130			
Vinyl Acetate	25.6	1.0	ug/l	25.0		102	57-149			
Vinyl chloride	22.2	0.50	ug/l	25.0		89	66-134			
Xylenes, Total	43.0	1.0	ug/l	50.0		86	70-130			
Freon 113	20.3	2.0	ug/l	25.0		81	63-136			
<i>Surrogate: Dibromofluoromethane</i>	21.3		ug/l	25.0		85	70-130			
<i>Surrogate: Toluene-d8</i>	21.9		ug/l	25.0		88	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	21.2		ug/l	25.0		85	70-130			

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Project Manager

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 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

### METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>LCS Dup Analyzed: 03/18/2011 (11C0694-BSD1)</b>										
Acetone	30.9	10	ug/l	25.0	124	30-150	6	35		
Benzene	21.1	0.50	ug/l	25.0	85	70-130	3	20		
Bromobenzene	22.8	0.50	ug/l	25.0	91	70-130	1	20		
Bromochloromethane	21.3	0.50	ug/l	25.0	85	70-130	3	20		
Bromodichloromethane	21.2	0.50	ug/l	25.0	85	70-130	3	20		
Bromoform	22.1	1.0	ug/l	25.0	88	67-122	2	20		
Bromomethane	22.2	1.0	ug/l	25.0	89	64-132	7	20		
2-Butanone (MEK)	24.4	2.5	ug/l	25.0	98	48-150	1	33		
n-Butylbenzene	23.3	0.50	ug/l	25.0	93	70-130	0.3	20		
sec-Butylbenzene	22.7	0.50	ug/l	25.0	91	70-130	1	20		
tert-Butylbenzene	22.4	0.50	ug/l	25.0	89	70-130	0.7	20		
Carbon disulfide	24.9	0.50	ug/l	25.0	99	61-126	3	20		
Carbon tetrachloride	22.7	0.50	ug/l	25.0	91	70-130	3	20		
Chlorobenzene	21.7	0.50	ug/l	25.0	87	70-130	0.2	20		
Chloroethane	22.3	1.0	ug/l	25.0	89	69-128	5	20		
Chloroform	20.8	0.50	ug/l	25.0	83	70-130	4	20		
Chloromethane	23.2	1.0	ug/l	25.0	93	56-131	5	20		
2-Chlorotoluene	22.0	0.50	ug/l	25.0	88	70-130	0.7	20		
4-Chlorotoluene	22.6	0.50	ug/l	25.0	90	70-130	1	20		
Dibromochloromethane	21.9	0.50	ug/l	25.0	88	70-130	1	20		
1,2-Dibromo-3-chloropropane	22.3	2.5	ug/l	25.0	89	63-129	6	25		
1,2-Dibromoethane (EDB)	21.9	0.50	ug/l	25.0	88	70-130	0.6	20		
Dibromomethane	21.7	0.50	ug/l	25.0	87	70-130	2	20		
1,2-Dichlorobenzene	22.0	0.50	ug/l	25.0	88	70-130	0	20		
1,3-Dichlorobenzene	22.2	0.50	ug/l	25.0	89	70-130	0	20		
1,4-Dichlorobenzene	22.1	0.50	ug/l	25.0	88	70-130	0.8	20		
Dichlorodifluoromethane	21.8	0.50	ug/l	25.0	87	42-150	3	20		
1,1-Dichloroethane	21.5	0.50	ug/l	25.0	86	70-130	6	20		
1,2-Dichloroethane	20.8	0.50	ug/l	25.0	83	72-133	3	20		
1,1-Dichloroethene	21.8	0.50	ug/l	25.0	87	70-130	6	20		
cis-1,2-Dichloroethene	20.1	0.50	ug/l	25.0	80	70-130	0.4	20		
trans-1,2-Dichloroethene	21.9	0.50	ug/l	25.0	88	70-130	5	20		
1,2-Dichloropropane	21.6	0.50	ug/l	25.0	86	70-130	1	20		
1,3-Dichloropropane	21.2	0.50	ug/l	25.0	85	70-130	0.4	20		
2,2-Dichloropropane	21.5	1.0	ug/l	25.0	86	70-130	1	20		

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
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 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

### METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>LCS Dup Analyzed: 03/18/2011 (11C0694-BSD1)</b>										
1,1-Dichloropropene	22.1	0.50	ug/l	25.0	88	70-130	2	20		
cis-1,3-Dichloropropene	21.8	0.50	ug/l	25.0	87	70-130	0	20		
trans-1,3-Dichloropropene	22.2	0.50	ug/l	25.0	89	70-130	3	20		
Ethylbenzene	21.8	0.50	ug/l	25.0	87	70-130	0.2	20		
Hexachlorobutadiene	23.7	1.0	ug/l	25.0	95	70-130	0.04	20		
2-Hexanone	22.8	2.5	ug/l	25.0	91	44-150	13	31		
Iodomethane	28.8	2.5	ug/l	25.0	115	58-138	15	25		
Isopropylbenzene	25.0	0.50	ug/l	25.0	100	70-130	1	20		
p-Isopropyltoluene	23.1	0.50	ug/l	25.0	92	70-130	0.8	20		
Methylene Chloride	20.8	1.0	ug/l	25.0	83	70-130	2	20		
4-Methyl-2-pentanone (MIBK)	23.2	2.5	ug/l	25.0	93	61-142	2	22		
Methyl-tert-butyl Ether (MTBE)	20.2	0.50	ug/l	25.0	81	70-130	4	20		
Naphthalene	23.4	2.5	ug/l	25.0	94	65-129	1	20		
n-Propylbenzene	23.4	0.50	ug/l	25.0	93	70-130	0.3	20		
Styrene	22.5	0.50	ug/l	25.0	90	70-130	0.8	20		
1,1,1,2-Tetrachloroethane	21.6	0.50	ug/l	25.0	86	70-130	0.8	20		
1,1,2,2-Tetrachloroethane	21.6	0.50	ug/l	25.0	86	70-130	5	20		
Tetrachloroethene	22.2	0.50	ug/l	25.0	89	70-130	2	20		
Toluene	22.2	0.50	ug/l	25.0	89	70-130	3	20		
1,2,3-Trichlorobenzene	23.8	1.0	ug/l	25.0	95	70-130	2	20		
1,2,4-Trichlorobenzene	24.6	1.0	ug/l	25.0	98	70-130	2	20		
1,1,1-Trichloroethane	21.8	0.50	ug/l	25.0	87	70-130	3	20		
1,1,2-Trichloroethane	21.4	0.50	ug/l	25.0	85	70-130	0.7	20		
Trichloroethene	21.5	0.50	ug/l	25.0	86	70-130	1	20		
Trichlorofluoromethane	24.4	0.50	ug/l	25.0	98	78-149	22	20	R6	
1,2,3-Trichloropropane	22.0	1.0	ug/l	25.0	88	70-130	9	20		
1,2,4-Trimethylbenzene	23.2	0.50	ug/l	25.0	93	70-130	0.3	20		
1,3,5-Trimethylbenzene	22.8	0.50	ug/l	25.0	91	70-130	2	20		
Vinyl Acetate	25.8	1.0	ug/l	25.0	103	57-149	0.8	21		
Vinyl chloride	22.4	0.50	ug/l	25.0	90	66-134	1	20		
Xylenes, Total	43.3	1.0	ug/l	50.0	87	70-130	0.6	20		
Freon 113	20.8	2.0	ug/l	25.0	83	63-136	2	20		
Surrogate: Dibromofluoromethane	21.9		ug/l	25.0	87	70-130				
Surrogate: Toluene-d8	21.6		ug/l	25.0	86	70-130				
Surrogate: 4-Bromofluorobenzene	21.4		ug/l	25.0	86	70-130				

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602)

454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11

Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>Matrix Spike Analyzed: 03/18/2011 (11C0694-MS1)</b>										
<b>Source: PUC0827-02</b>										
Acetone	31.2	10	ug/l	25.0	ND	125	10-150			
Benzene	21.6	0.50	ug/l	25.0	ND	86	70-130			
Bromobenzene	22.9	0.50	ug/l	25.0	ND	92	70-130			
Bromochloromethane	22.6	0.50	ug/l	25.0	ND	90	70-130			
Bromodichloromethane	22.4	0.50	ug/l	25.0	ND	90	70-130			
Bromoform	23.8	1.0	ug/l	25.0	ND	95	62-126			
Bromomethane	22.0	1.0	ug/l	25.0	ND	88	55-136			
2-Butanone (MEK)	25.6	2.5	ug/l	25.0	ND	103	22-150			
n-Butylbenzene	23.5	0.50	ug/l	25.0	ND	94	70-130			
sec-Butylbenzene	22.6	0.50	ug/l	25.0	ND	90	70-130			
tert-Butylbenzene	22.6	0.50	ug/l	25.0	ND	90	70-130			
Carbon disulfide	30.5	0.50	ug/l	25.0	ND	122	56-132			
Carbon tetrachloride	22.9	0.50	ug/l	25.0	ND	92	76-131			
Chlorobenzene	21.7	0.50	ug/l	25.0	ND	87	70-130			
Chloroethane	24.3	1.0	ug/l	25.0	ND	97	67-134			
Chloroform	23.0	0.50	ug/l	25.0	1.20	87	70-130			
Chloromethane	22.0	1.0	ug/l	25.0	ND	88	50-135			
2-Chlorotoluene	21.7	0.50	ug/l	25.0	ND	87	70-130			
4-Chlorotoluene	22.6	0.50	ug/l	25.0	ND	90	70-130			
Dibromochloromethane	22.7	0.50	ug/l	25.0	ND	91	70-130			
1,2-Dibromo-3-chloropropane	23.2	2.5	ug/l	25.0	ND	93	60-135			
1,2-Dibromoethane (EDB)	23.5	0.50	ug/l	25.0	ND	94	70-130			
Dibromomethane	23.2	0.50	ug/l	25.0	ND	93	70-130			
1,2-Dichlorobenzene	22.8	0.50	ug/l	25.0	ND	91	70-130			
1,3-Dichlorobenzene	22.8	0.50	ug/l	25.0	ND	91	70-130			
1,4-Dichlorobenzene	22.6	0.50	ug/l	25.0	ND	90	70-130			
Dichlorodifluoromethane	22.7	0.50	ug/l	25.0	ND	91	36-150			
1,1-Dichloroethane	21.9	0.50	ug/l	25.0	ND	88	70-130			
1,2-Dichloroethane	22.9	0.50	ug/l	25.0	ND	92	68-143			
1,1-Dichloroethene	26.8	0.50	ug/l	25.0	ND	107	70-130			
cis-1,2-Dichloroethene	21.7	0.50	ug/l	25.0	ND	87	70-130			
trans-1,2-Dichloroethene	22.4	0.50	ug/l	25.0	ND	90	70-130			
1,2-Dichloropropane	22.7	0.50	ug/l	25.0	ND	91	70-130			
1,3-Dichloropropane	22.9	0.50	ug/l	25.0	ND	91	70-130			
2,2-Dichloropropane	22.1	1.0	ug/l	25.0	ND	88	66-130			

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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PUC0829 <17 of 280

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11

Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0694 Extracted: 03/18/11</u></b>										
<b>Matrix Spike Analyzed: 03/18/2011 (11C0694-MS1)</b>										
					<b>Source: PUC0827-02</b>					
1,1-Dichloropropene	22.5	0.50	ug/l	25.0	ND	90	70-130			
cis-1,3-Dichloropropene	22.5	0.50	ug/l	25.0	ND	90	70-130			
trans-1,3-Dichloropropene	24.6	0.50	ug/l	25.0	ND	98	71-132			
Ethylbenzene	21.8	0.50	ug/l	25.0	ND	87	70-130			
Hexachlorobutadiene	23.7	1.0	ug/l	25.0	ND	95	66-129			
2-Hexanone	25.8	2.5	ug/l	25.0	ND	103	18-150			
Iodomethane	35.6	2.5	ug/l	25.0	ND	142	47-141			NI
Isopropylbenzene	24.9	0.50	ug/l	25.0	ND	99	78-137			
p-Isopropyltoluene	23.3	0.50	ug/l	25.0	ND	93	70-130			
Methylene Chloride	26.8	1.0	ug/l	25.0	ND	107	74-132			
4-Methyl-2-pentanone (MIBK)	25.0	2.5	ug/l	25.0	ND	100	56-145			
Methyl-tert-butyl Ether (MTBE)	22.3	0.50	ug/l	25.0	ND	89	67-138			
Naphthalene	23.6	2.5	ug/l	25.0	ND	95	54-135			
n-Propylbenzene	23.3	0.50	ug/l	25.0	ND	93	70-130			
Styrene	21.4	0.50	ug/l	25.0	ND	86	51-123			
1,1,1,2-Tetrachloroethane	22.0	0.50	ug/l	25.0	ND	88	70-130			
1,1,2,2-Tetrachloroethane	23.8	0.50	ug/l	25.0	ND	95	69-133			
Tetrachloroethene	23.8	0.50	ug/l	25.0	1.89	88	70-130			
Toluene	21.6	0.50	ug/l	25.0	ND	86	70-130			
1,2,3-Trichlorobenzene	25.3	1.0	ug/l	25.0	ND	101	70-130			
1,2,4-Trichlorobenzene	25.4	1.0	ug/l	25.0	ND	102	66-126			
1,1,1-Trichloroethane	22.7	0.50	ug/l	25.0	ND	91	76-132			
1,1,2-Trichloroethane	22.8	0.50	ug/l	25.0	ND	91	70-130			
Trichloroethene	22.0	0.50	ug/l	25.0	0.400	87	70-130			
Trichlorofluoromethane	27.1	0.50	ug/l	25.0	ND	108	74-150			
1,2,3-Trichloropropane	22.8	1.0	ug/l	25.0	ND	91	70-130			
1,2,4-Trimethylbenzene	23.4	0.50	ug/l	25.0	ND	93	70-130			
1,3,5-Trimethylbenzene	22.9	0.50	ug/l	25.0	ND	91	61-138			
Vinyl Acetate	28.1	1.0	ug/l	25.0	ND	112	50-150			
Vinyl chloride	23.5	0.50	ug/l	25.0	ND	94	58-139			
Xylenes, Total	43.3	1.0	ug/l	50.0	ND	87	70-130			
Freon 113	26.4	2.0	ug/l	25.0	ND	106	56-148			
Surrogate: Dibromofluoromethane	22.2		ug/l	25.0		89	70-130			
Surrogate: Toluene-d8	21.8		ug/l	25.0		87	70-130			
Surrogate: 4-Bromofluorobenzene	21.5		ug/l	25.0		86	70-130			

**TestAmerica Phoenix**

 Kylie Emily  
 Project Manager

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PUC0829 &lt; 18 of 280

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>Matrix Spike Dup Analyzed: 03/18/2011 (11C0694-MSD1)</b>										
<b>Source: PUC0827-02</b>										
Acetone	26.7	10	ug/l	25.0	ND	107	10-150	15	35	
Benzene	21.7	0.50	ug/l	25.0	ND	87	70-130	0.5	20	
Bromobenzene	22.9	0.50	ug/l	25.0	ND	92	70-130	0.04	20	
Bromoform	23.7	1.0	ug/l	25.0	ND	95	62-126	0.3	20	
Bromomethane	21.9	1.0	ug/l	25.0	ND	88	55-136	0.5	24	
2-Butanone (MEK)	24.7	2.5	ug/l	25.0	ND	99	22-150	4	31	
n-Butylbenzene	23.4	0.50	ug/l	25.0	ND	94	70-130	0.3	20	
sec-Butylbenzene	22.6	0.50	ug/l	25.0	ND	90	70-130	0.3	20	
tert-Butylbenzene	22.6	0.50	ug/l	25.0	ND	90	70-130	0.09	20	
Carbon disulfide	25.2	0.50	ug/l	25.0	ND	101	56-132	19	20	
Carbon tetrachloride	23.3	0.50	ug/l	25.0	ND	93	76-131	2	20	
Chlorobenzene	22.1	0.50	ug/l	25.0	ND	88	70-130	2	20	
Chloroethane	22.4	1.0	ug/l	25.0	ND	90	67-134	8	20	
Chloroform	22.7	0.50	ug/l	25.0	1.20	86	70-130	1	20	
Chloromethane	19.9	1.0	ug/l	25.0	ND	80	50-135	10	20	
2-Chlorotoluene	22.0	0.50	ug/l	25.0	ND	88	70-130	1	20	
4-Chlorotoluene	22.8	0.50	ug/l	25.0	ND	91	70-130	1	20	
Dibromochloromethane	22.5	0.50	ug/l	25.0	ND	90	70-130	0.8	20	
1,2-Dibromo-3-chloropropane	24.0	2.5	ug/l	25.0	ND	96	60-135	4	29	
1,2-Dibromoethane (EDB)	22.8	0.50	ug/l	25.0	ND	91	70-130	3	20	
Dibromomethane	22.9	0.50	ug/l	25.0	ND	92	70-130	2	20	
1,2-Dichlorobenzene	22.3	0.50	ug/l	25.0	ND	89	70-130	2	20	
1,3-Dichlorobenzene	22.5	0.50	ug/l	25.0	ND	90	70-130	1	20	
1,4-Dichlorobenzene	22.4	0.50	ug/l	25.0	ND	90	70-130	0.8	20	
Dichlorodifluoromethane	22.2	0.50	ug/l	25.0	ND	89	36-150	2	22	
1,1-Dichloroethane	21.4	0.50	ug/l	25.0	ND	86	70-130	2	20	
1,2-Dichloroethane	21.9	0.50	ug/l	25.0	ND	88	68-143	5	20	
1,1-Dichloroethene	21.4	0.50	ug/l	25.0	ND	86	70-130	22	20	RI
cis-1,2-Dichloroethene	20.6	0.50	ug/l	25.0	ND	82	70-130	5	20	
trans-1,2-Dichloroethene	22.0	0.50	ug/l	25.0	ND	88	70-130	2	20	
1,2-Dichloropropane	22.7	0.50	ug/l	25.0	ND	91	70-130	0.09	20	
1,3-Dichloropropane	22.3	0.50	ug/l	25.0	ND	89	70-130	3	20	
2,2-Dichloropropane	21.6	1.0	ug/l	25.0	ND	86	66-130	2	20	

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
 Received: 03/11/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0694 Extracted: 03/18/11</u>										
<b>Matrix Spike Dup Analyzed: 03/18/2011 (11C0694-MSD1)</b>										
<b>Source: PUC0827-02</b>										
1,1-Dichloropropene	22.6	0.50	ug/l	25.0	ND	90	70-130	0.7	20	
cis-1,3-Dichloropropene	22.9	0.50	ug/l	25.0	ND	92	70-130	2	20	
trans-1,3-Dichloropropene	23.8	0.50	ug/l	25.0	ND	95	71-132	3	20	
Ethylbenzene	22.0	0.50	ug/l	25.0	ND	88	70-130	1	20	
Hexachlorobutadiene	23.6	1.0	ug/l	25.0	ND	95	66-129	0.2	21	
2-Hexanone	25.1	2.5	ug/l	25.0	ND	100	18-150	3	25	
Iodomethane	29.0	2.5	ug/l	25.0	ND	116	47-141	20	29	
Isopropylbenzene	25.0	0.50	ug/l	25.0	ND	100	78-137	0.6	20	
p-Isopropyltoluene	23.0	0.50	ug/l	25.0	ND	92	70-130	1	20	
Methylene Chloride	21.3	1.0	ug/l	25.0	ND	85	74-132	23	20	RI
4-Methyl-2-pentanone (MIBK)	24.6	2.5	ug/l	25.0	ND	98	56-145	2	26	
Methyl-tert-butyl Ether (MTBE)	21.7	0.50	ug/l	25.0	ND	87	67-138	3	21	
Naphthalene	24.6	2.5	ug/l	25.0	ND	98	54-135	4	33	
n-Propylbenzene	23.4	0.50	ug/l	25.0	ND	94	70-130	0.5	20	
Styrene	21.4	0.50	ug/l	25.0	ND	85	51-123	0.2	21	
1,1,1,2-Tetrachloroethane	22.4	0.50	ug/l	25.0	ND	90	70-130	2	20	
1,1,2,2-Tetrachloroethane	23.4	0.50	ug/l	25.0	ND	94	69-133	1	20	
Tetrachloroethene	24.2	0.50	ug/l	25.0	1.89	89	70-130	1	20	
Toluene	22.2	0.50	ug/l	25.0	ND	89	70-130	3	20	
1,2,3-Trichlorobenzene	24.8	1.0	ug/l	25.0	ND	99	70-130	2	20	
1,2,4-Trichlorobenzene	24.9	1.0	ug/l	25.0	ND	99	66-126	2	20	
1,1,1-Trichloroethane	22.3	0.50	ug/l	25.0	ND	89	76-132	2	20	
1,1,2-Trichloroethane	22.6	0.50	ug/l	25.0	ND	90	70-130	1	20	
Trichloroethene	22.6	0.50	ug/l	25.0	0.400	89	70-130	3	20	
Trichlorofluoromethane	25.7	0.50	ug/l	25.0	ND	103	74-150	5	20	
1,2,3-Trichloropropane	24.0	1.0	ug/l	25.0	ND	96	70-130	5	20	
1,2,4-Trimethylbenzene	23.2	0.50	ug/l	25.0	ND	93	70-130	0.4	20	
1,3,5-Trimethylbenzene	22.8	0.50	ug/l	25.0	ND	91	61-138	0.4	33	
Vinyl Acetate	26.4	1.0	ug/l	25.0	ND	105	50-150	6	23	
Vinyl chloride	23.2	0.50	ug/l	25.0	ND	93	58-139	1	21	
Xylenes, Total	43.5	1.0	ug/l	50.0	ND	87	70-130	0.3	20	
Freon 113	20.4	2.0	ug/l	25.0	ND	82	56-148	26	22	RI
Surrogate: Dibromofluoromethane	21.7		ug/l	25.0		87	70-130			
Surrogate: Toluene-d8	21.8		ug/l	25.0		87	70-130			
Surrogate: 4-Bromofluorobenzene	21.7		ug/l	25.0		87	70-130			

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## METHOD BLANK/QC DATA

### 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0526 Extracted: 03/14/11</u>										
<b>Blank Analyzed: 03/16/2011 (11C0526-BLK1)</b>										
1,4-Dioxane	ND	1.0	ug/l							
Surrogate: 1,4-Dioxane-d8	14.5		ug/l	20.0		73	20-105			
Surrogate: Nitrobenzene-d5	15.7		ug/l	20.0		79	30-130			
<b>LCS Analyzed: 03/16/2011 (11C0526-BS1)</b>										
1,4-Dioxane	20.9	1.0	ug/l	20.0		104	85-115			Q8
Surrogate: 1,4-Dioxane-d8	12.9		ug/l	20.0		64	30-105			
Surrogate: Nitrobenzene-d5	14.9		ug/l	20.0		74	35-140			
<b>LCS Dup Analyzed: 03/16/2011 (11C0526-BSD1)</b>										
1,4-Dioxane	20.8	1.0	ug/l	20.0		104	85-115	0.3	20	
Surrogate: 1,4-Dioxane-d8	14.2		ug/l	20.0		71	30-105			
Surrogate: Nitrobenzene-d5	16.6		ug/l	20.0		83	35-140			

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Project Manager

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PUC0829 <F 21 of 280

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009  
Report Number: PUC0829

Sampled: 03/11/11  
Received: 03/11/11

## DATA QUALIFIERS AND DEFINITIONS

- N1** See case narrative.
- Q8** Insufficient sample received to meet method QC requirements. Batch QC requirements satisfy ADEQ policies 0154.000 and 0155.000.
- R1** The RPD/RSD exceeded the method acceptance limit.
- R6** LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

### TestAmerica Phoenix

Kylie Emily  
Project Manager

*The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.*

PUC0829 <1 22 of 280

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## Certification Summary

### TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8260B	Water	X	X
SW8270C	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at [www.testamericainc.com](http://www.testamericainc.com)*

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PUC0829 <1 23 of 280



## CALIBRATION DATA

METHOD: 8260B

DATE: 03/17/2011



## CALIBRATION DATA

METHOD: 8260B

DATE: 03/17/2011

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: Volatiles	Method: 8260B	Instrument #: GCMS 7
Analyst: LC	Analysis Date: 03/17/11	
<b>Method name saved in the file:</b>		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, (9), 10, 11, 12		
2. Did the calibration curve pass the method criteria? (Y) N		
3. Were any points of the curve removed or replaced? Y (N)		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? (Y) N		
If yes, what points were removed or replaced: (lowest) middle (highest)		
List of the analytes: Acetone, Methylene chloride, MEK, 2-EVE, MIBK, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene		
Why? LIRL, Curve Fit		
5. Circle the calibration model used (you may circle one or more)		
<input checked="" type="checkbox"/> Average Response Factor		
<input checked="" type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input checked="" type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: (Y) N		

Review Signatures:	Analyst:	Yan-Chi	Date: 03/18/11
	Reviewer:	M. M.	Date: 3/18/11

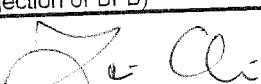
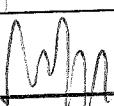
Attachment 2  
ANALYTICAL DATA REVIEW CHECKLIST

SOP PE-VOA-011 R.0

VOCs in Vapor [ Method No. 8260B AZ Method ]

Analysis Date:	03/17/11	Analyst:	LC
Description	Yes	No	NA <sup>1</sup>
1. BFB (50 ng or less): Verify meets criteria every 12 hours	/	/	/
2. Initial Calibration Curve (5 levels)	/	/	/
- Date of Initial Calibration: 03/17/11.W1	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 30% RPD	/	/	/
- All other compounds ≤ 15% RSD or use curve	/	/	/
- Comments:	/	/	(1)
- Second source within historical limits	/	/	/
- Tertiary source within 50 – 150% recovery	/	/	/
3. Continuing Calibration Check (every 12 hours)	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 20% D	/	/	/
- IS RT ± 30 secs	/	/	/
- IS area -50% to +100%	/	/	/
- All CCVs for reported analytes within historical limits	/	/	/
4. Method Blank	/	/	/
- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/	/	/
- All compounds of interest must be < Reporting Limit	/	/	/
5. Laboratory Control Samples (LCS/LCSD)	/	/	W/A
- Must be analyzed per 20 samples/per matrix/per batch	/	/	/
- LCS/LCSD recoveries within historical limits	/	/	/
- RPD ≤ 25%	/	/	/
- Surrogates within historical limits	/	/	/
6. Samples	/	/	/
- Analyzed within 72 hours of sampling	/	/	/
- IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL	/	/	/
- Surrogate recoveries within historical limits	/	/	/
- Sample Duplicate performed every 10 samples	/	/	/
Comments:	(1) Bromomethane - N1 - See CAR		

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: 	Date: 03/18/11
	Reviewer: 	Date: 3/18/11

<sup>1</sup>) NA: Not Applicable

27 of 280

TestAmerica  
Phoenix

Instrument ID	GCMS 7
Date:	03/17/11
Analyst	LC
Method(s)	8260B
50 ppm Cal. Std.	PW01525
2.5 ppm Cal. Std.	PW01528
500 / 250 ppm EtOH/TBA Cal. Std.	N/A
50 / 25 ppm EtOH/TBA Cal. Std.	N/A
50 ppm SS Std.	PW01537
500 / 250 ppm EtOH/TBA SS Std.	N/A

3<sup>rd</sup> Gas: PT06459

This table outlines the initial calibration preparation for GCMS 7, GCMS 4 and GCMS 2.

Calibration Number	FINAL CONCENTRATIONS (ppb)				SPIKE AMOUNTS ( $\mu$ L) in 10 mL final volume			
	ISTD / TBA-d9	VOC	Ethanol	TBA	50ppm Ethanol / 25ppm TBA	2.5ppm VOC Cal. Std.	500ppm Ethanol / 250ppm TBA	50ppm VOC Cal. Std.
1	25/200	0.5	5	2.5	1	2		
2	25/200	1.0	10	5	2	4		
3	25/200	2.0	20	10	4	8		
4	25/200	5.0	50	25			1	1
5	25/200	10	100	50			2	2
6*	25/200	25	250	125			5	5
7	25/200	50	750	375			10	10
8	25/200	100	1000	500			20	20
9	25/200	200	2000	1000			40	40

\*SS/ICVs are at the same level as Calibration point #6 and prepared the same way.

Reviewed By: John

Date: 3/18/11

28 of 280

## Response Factor Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\0317111.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

Calibration File

0.5 =03171106.D 1.0 =03171107.D 2.0 =03171108.D 5.0 =03171109.D

25.0 =03171111.D 50.0 =03171112.D 100. =03171113.D 200. =03171114.D

Compound 0.5 1.0 2.0 5.0 10.0 25.0 50.0 100. 200. Avg %RSD

	ISTD								
I	Pentafluorobenzene	1.278	1.131	1.176	1.343	1.199	1.217	1.132	1.112 1.041
T	Dichlorodifluoromethane	1.965	1.722	1.705	2.115	2.031	1.963	1.991	2.043 2.039
TMP	Chloromethane	1.791	1.789	1.668	1.817	1.677	1.725	1.728	1.753 1.700
TMC	Vinyl chloride	0.920	0.793	0.521	0.711	0.801	0.859	0.858	0.916 0.940
TM	Bromomethane	1.005	1.039	0.879	0.958	0.956	0.913	0.871	0.834 0.839
TM	Chloroethane	1.302	1.243	1.207	1.370	1.280	1.303	0.986	0.997 1.191
TM	Trichlorofluoromethane	(0.374)	(0.374)	0.374	0.261	0.172	0.158	0.128	0.120 0.141
T	Acetone	0.379	0.589	0.400	0.584	0.546	0.597	0.565	0.561 0.556
T	Iodomethane	0.860	0.836	0.621	0.721	0.703	0.678	0.638	0.643 0.644
TMC	1,1-Dichloroethene	(1.032)	0.802	0.901	0.831	0.804	0.764	0.757	0.744
TM	Methylene chloride	1.047	0.958	0.765	0.861	0.786	0.813	0.761	0.768 0.755
Freon 113		2.991	2.718	2.262	2.705	2.441	2.445	2.339	2.359 2.318
T	Carbon disulfide	0.822	0.931	0.715	0.835	0.766	0.772	0.720	0.735 0.725
TM	trans-1,2-Dichloroethene	1.501	1.617	1.243	1.449	1.271	1.308	1.179	1.227 1.204
T	MTBE	1.773	1.868	1.535	1.752	1.632	1.610	1.498	1.506 1.474
TMP	1,1-Dichloroethane	1.436	1.510	1.090	1.380	1.226	1.231	1.161	1.181 1.162
T	Vinyl acetate	(0.013)	(0.013)	0.037	0.040	0.042	0.040	0.040	0.040 0.040
T	2-Butanone (MEK)	(0.789)	(0.789)	0.816	0.898	0.803	0.800	0.745	0.754 0.751
T	cis-1,2-Dichloroethene	0.338	0.306	0.271	0.338	0.314	0.289	0.279	0.273 0.253
T	Bromochlormethane	1.474	1.291	1.359	1.505	1.426	1.329	1.229	1.253 1.222
TMC	Chloroform	1.151	1.062	1.049	1.207	1.108	1.096	1.056	1.056 1.014
T	2,2-Dichloropropane	0.743	0.594	0.581	0.695	0.640	0.629	0.585	0.607 0.588
S	Dibromofluoromethane	0.873	0.905	0.802	0.893	0.804	0.804	0.757	0.772 0.740
TM	1,2-Dichloroethane	0.981	0.938	0.900	1.069	0.997	0.987	0.942	0.927 0.964
TM	1,1,1-Trichloroethane								
	ISTD								
I	1,4-Difluorobenzene	0.676	0.609	0.621	0.674	0.653	0.658	0.630	0.618 0.620
T	1,1-Dichloropropene	0.426	0.417	0.414	0.477	0.459	0.458	0.442	0.442 0.440
TM	Carbon tetrachloride	1.854	1.747	1.665	1.787	1.702	1.685	1.664	1.658 1.636
TM	Benzene	0.220	0.217	0.194	0.215	0.208	0.199	0.193	0.191 0.186
T	Dibromomethane	0.525	0.461	0.462	0.521	0.468	0.481	0.465	0.464 0.454
TMC	1,2-Dichloropropane	0.455	0.415	0.412	0.467	0.422	0.428	0.421	0.419 0.412
TM	Trichloroethene	0.507	0.483	0.464	0.551	0.511	0.518	0.496	0.501 0.491
TM	Bromodichloromethane	0.588	0.595	0.568	0.665	0.626	0.630	0.602	0.611 0.602
	cis-1,3-Dichloropropene								

(#) = Out of Range

031711 M

Thu Mar 17 14:51:40 2011

## Calibration Status Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

#	ID	Conc	ISTD	Path\File
			Conc	
1	0.5	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D
2	1.0	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D
3	2.0	2	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D
4	5.0	5	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D
5	10.0	10	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D
6	25.0	25	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D
7	50.0	50	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D
8	100.	100	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D
9	200.	200	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	Mar 17 14:03 2011	Mar 17 13:56 2011	17 Mar 2011 9:12 am
2	1.0	Mar 17 14:03 2011	Mar 17 13:57 2011	17 Mar 2011 9:43 am
3	2.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:14 am
4	5.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:45 am
5	10.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:15 am
6	25.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:46 am
7	50.0	Mar 17 14:04 2011	Mar 17 14:01 2011	17 Mar 2011 12:17 pm
8	100.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 12:48 pm
9	200.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 1:19 pm

031711.M

Thu Mar 17 14:51:31 2011

31 of 280  
 3/18/11



## Compound List Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 Total Cpnds : 76

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene	168	10.60	1.000	A	0	A	L
2	T	Dichlorodifluoromethane	85	4.60	0.434	A	2	A	B
3	T	Chloromethane	50	4.89	0.461	A	1	A	B
4	T	Vinyl chloride	62	5.18	0.489	A	1	A	B
5	T	Bromomethane	94	5.78	0.545	L	1	A	B
6	T	Chloroethane	64	5.98	0.564	A	1	A	L
7	T	Trichlorofluoromethane	101	6.78	0.639	A	1	A	L
8	T	Acetone	43	6.94	0.654	L	1	A	B
9	T	Iodomethane	142	7.57	0.714	L	1	A	B
10	T	1,1-Dichloroethene	96	7.51	0.708	A	2	A	B
11	T	Methylene chloride	84	7.71	0.727	A	2	A	B
12		Freon 113	101	7.77	0.733	A	2	A	B
13	T	Carbon disulfide	76	8.03	0.757	A	0	A	B
14	T	trans-1,2-Dichloroethene	96	8.59	0.810	A	2	A	B
15	T	MTBE	73	8.74	0.824	A	1	A	B
16	T	1,1-Dichloroethane	63	8.92	0.841	A	2	A	L
17	T	Vinyl acetate	43	9.08	0.857	A	1	A	B
18	T	2-Butanone (MEK)	72	9.47	0.893	L	1	A	B
19	T	cis-1,2-Dichloroethene	96	9.66	0.911	A	2	A	B
20	T	Bromochloromethane	128	9.87	0.931	A	2	A	B
21	T	Chloroform	83	9.93	0.936	A	1	A	B
22	T	2,2-Dichloropropane	77	10.04	0.947	A	1	A	B
23	S	Dibromofluoromethane	113	10.09	0.951	A	0	A	B
24	T	1,2-Dichloroethane	62	10.78	1.017	A	1	A	B
25	T	1,1,1-Trichloroethane	97	10.91	1.029	A	2	A	B
26	I	1,4-Difluorobenzene	114	11.73	1.000	A	1	A	B
27	T	1,1-Dichloropropene	75	11.15	0.950	A	2	A	B
28	T	Carbon tetrachloride	117	11.39	0.971	A	1	A	B
29	T	Benzene	78	11.44	0.976	A	1	A	B
30	T	Dibromomethane	93	12.17	1.037	A	2	A	B
31	T	1,2-Dichloropropane	63	12.21	1.041	A	1	A	B
32	T	Trichloroethene	95	12.27	1.046	A	2	A	B
33	T	Bromodichloromethane	83	12.33	1.051	A	2	A	B
34	T	2-Chlorovinylethylether	63	12.86	1.097	L	1	A	B
35	T	cis-1,3-Dichloropropene	75	13.16	1.122	A	1	A	B
36		4-Methyl-2-pentanone (MIBK)	43	13.31	1.135	A	2	A	B
37	T	trans-1,3-Dichloropropene	75	13.73	1.171	A	1	A	B
38	T	1,1,2-Trichloroethane	83	13.95	1.189	A	2	A	B
39	S	Toluene-d8	98	14.12	1.204	A	0	A	B
40	T	Toluene	92	14.21	1.212	A	1	A	B
41	I	Chlorobenzene-d5	117	16.07	1.000	A	0	A	B
42	T	1,3-Dichloropropane	76	14.27	0.888	A	1	A	B
43	T	2-Hexanone	43	14.47	0.900	A	2	A	B
44	T	Dibromochloromethane	129	14.64	0.911	A	1	A	B
45	T	1,2-Dibromoethane	107	14.98	0.932	A	2	A	B
46	T	Tetrachloroethene	166	15.21	0.946	A	2	A	B
47	T	1,1,1,2-Tetrachloroethane	131	16.01	0.996	A	2	A	B
48	T	Chlorobenzene	112	16.12	1.003	A	2	A	B
49	T	Ethylbenzene	91	16.37	1.019	A	1	A	B
50	T	m,p-Xylenes	106	16.64	1.035	A	1	A	B
51	T	Styrene	104	17.09	1.064	A	1	A	B
52	T	o-Xylene	106	17.19	1.070	A	1	A	B
53	S	4-Bromofluorobenzene	95	17.75	1.105	A	2	A	B
5		1,4-Dichlorobenzene-d4	152	19.53	1.000	A	2	A	B
55	T	Bromoform	173	16.81	0.861	A	1	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.18	0.879	A	2	A	B
57	T	1,2,3-Trichloropropane	110	17.38	0.890	A	1	A	B
58	T	Isopropylbenzene	105	17.69	0.906	A	1	A	B
59	T	Bromobenzene	156	18.05	0.924	A	2	A	B

60	T	n-Propylbenzene	91	18.30	0.937	A	1	A	B
61	T	2-Chlorotoluene	91	18.44	0.944	A	1	A	R
62	T	4-Chlorotoluene	91	18.55	0.949	A	1	A	R
63	T	1,3,5-Trimethylbenzene	105	18.70	0.957	A	1	A	B
64	T	tert-Butylbenzene	119	19.09	0.977	A	1	A	B
65	T	1,2,4-Trimethylbenzene	105	19.23	0.984	A	1	A	B
66	T	sec-Butylbenzene	105	19.37	0.992	A	1	A	B
67	T	1,3-Dichlorobenzene	146	19.48	0.997	A	2	A	R
68	T	1,4-Dichlorobenzene	146	19.57	1.002	A	2	A	R
69	T	p-Isopropyltoluene	119	19.61	1.004	A	2	A	B
70	T	1,2-Dichlorobenzene	146	20.02	1.025	A	2	A	B
71	T	n-Butylbenzene	91	20.12	1.030	A	1	A	B
72	T	1,2-Dibromo-3-chloropropane	157	20.58	1.054	A	1	A	B
73	T	1,2,4-Trichlorobenzene	180	22.28	1.141	A	1	A	B
74	T	Naphthalene	128	22.63	1.158	A	0	A	B
75	T	Hexachlorobutadiene	225	22.68	1.161	A	1	A	B
76	T	1,2,3-Trichlorobenzene	180	22.90	1.172	A	1	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

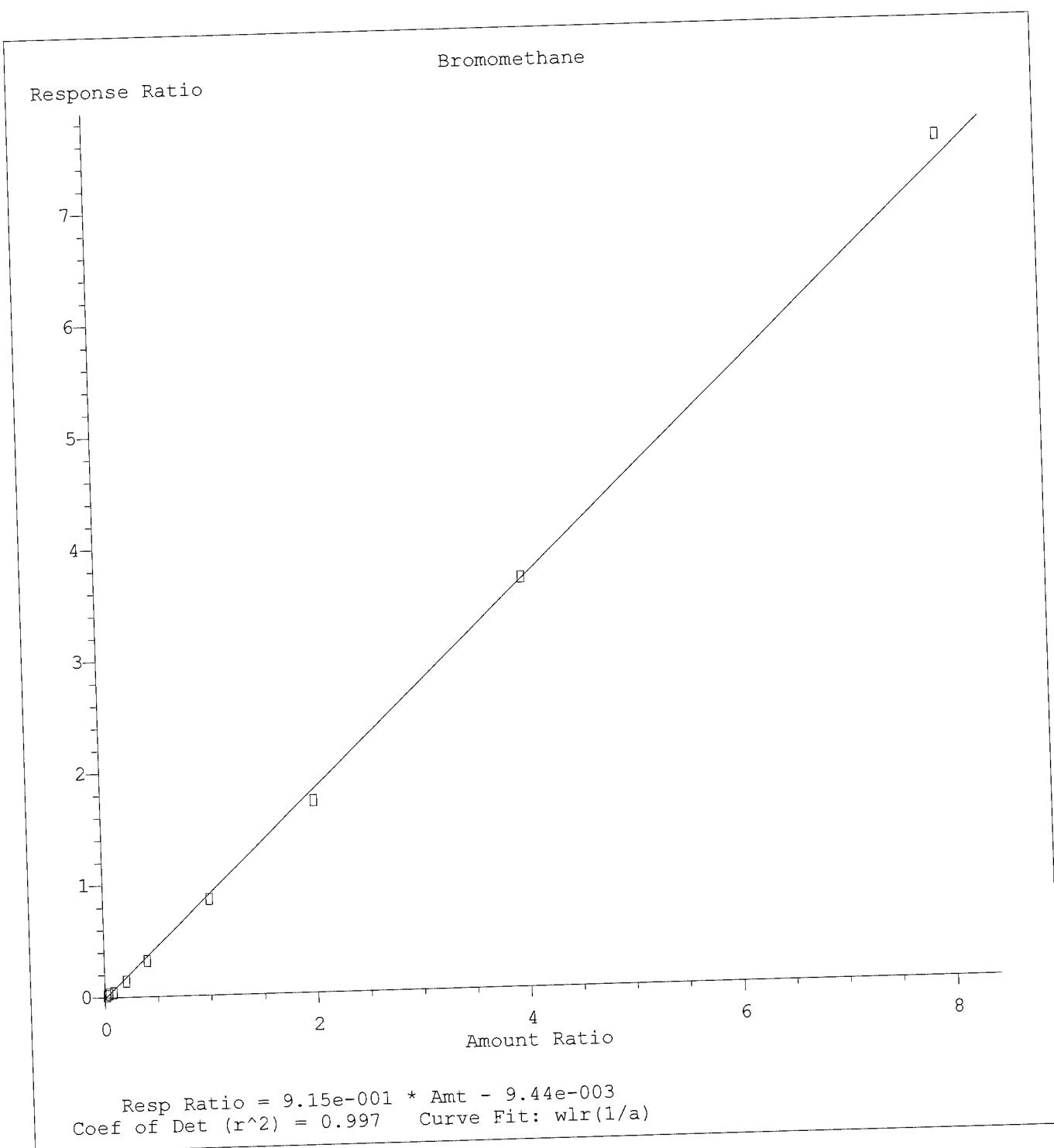
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

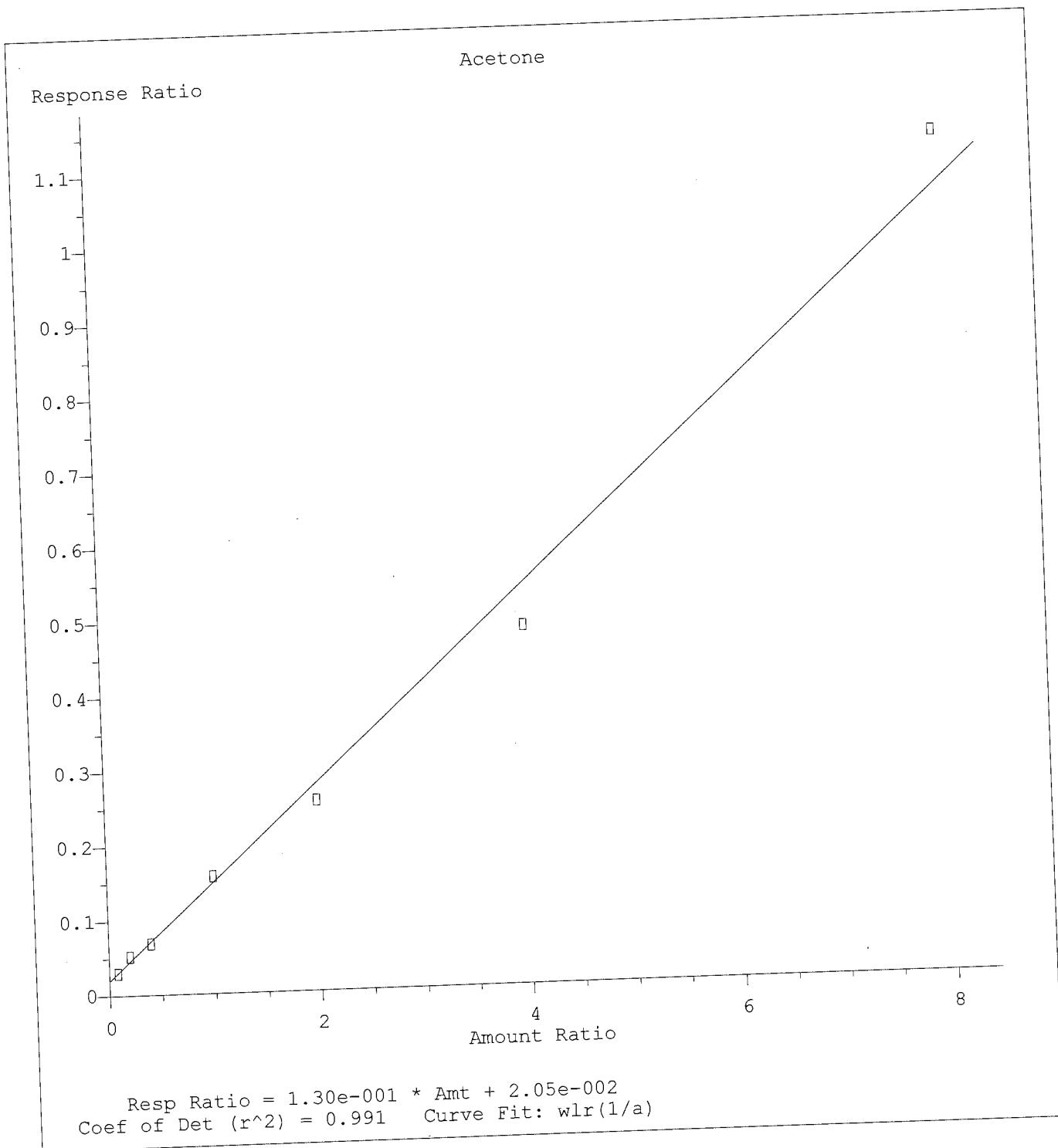
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031711.M Thu Mar 17 14:51:24 2011





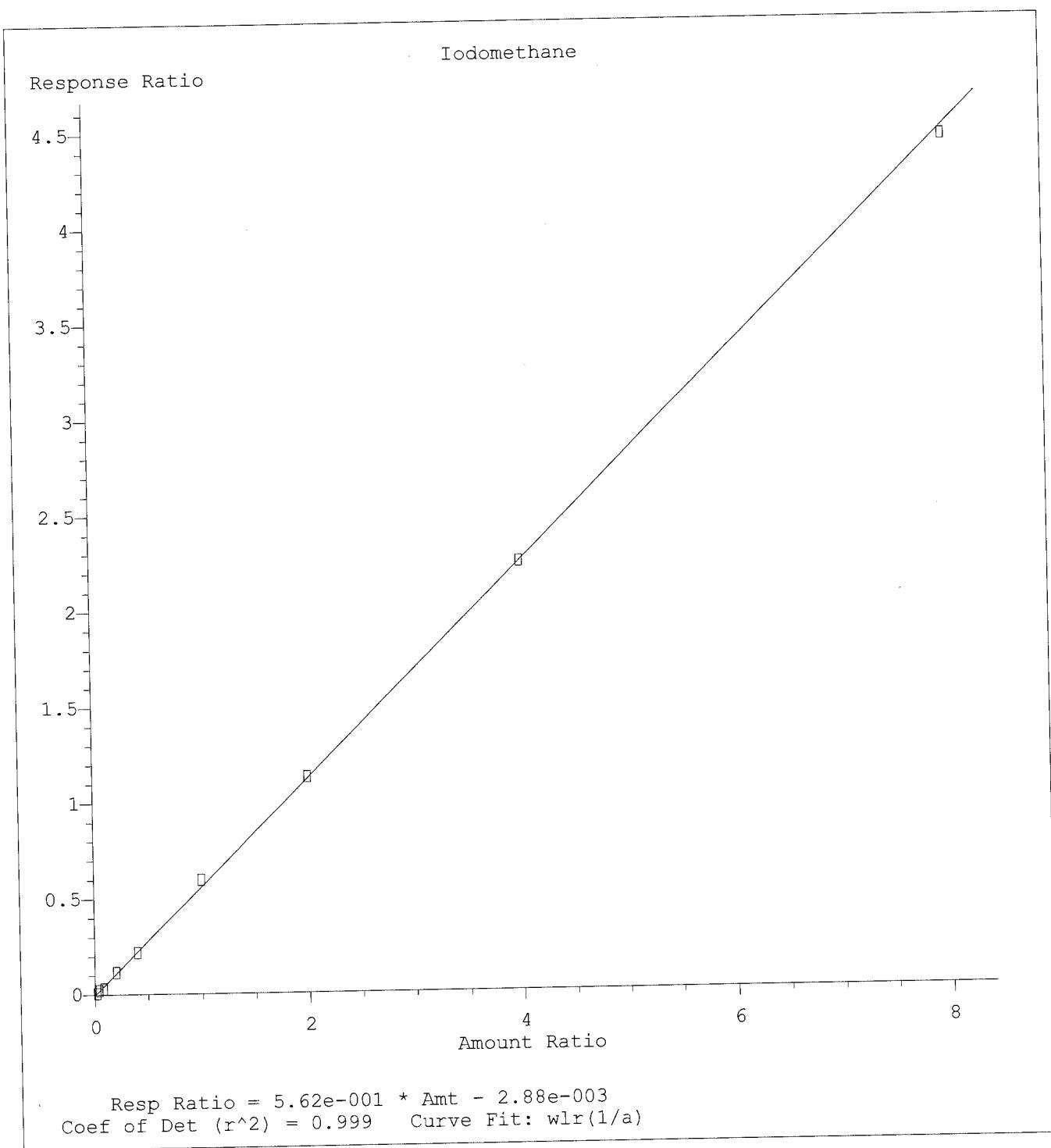
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

34 of 280



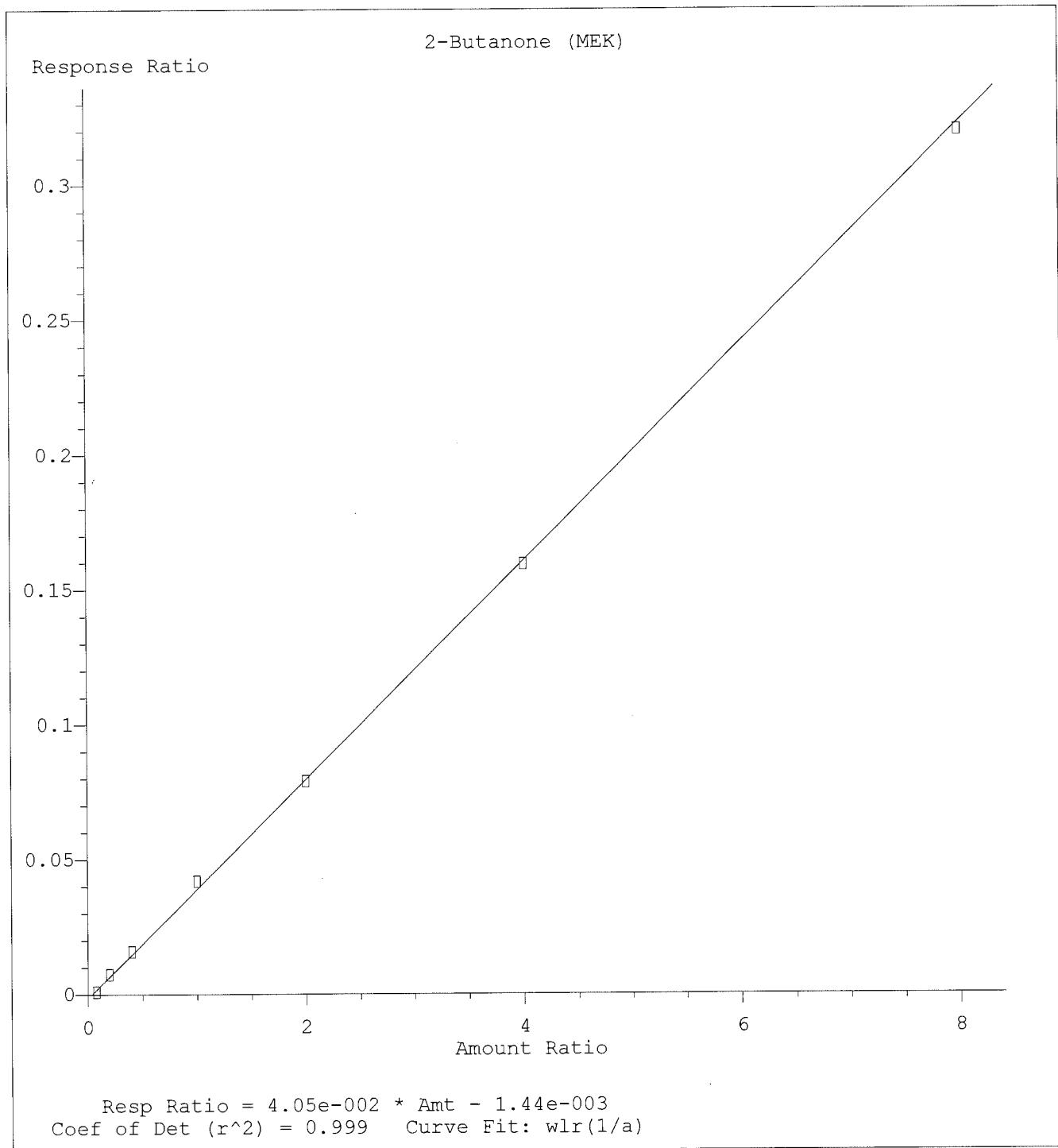
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

35 of 280



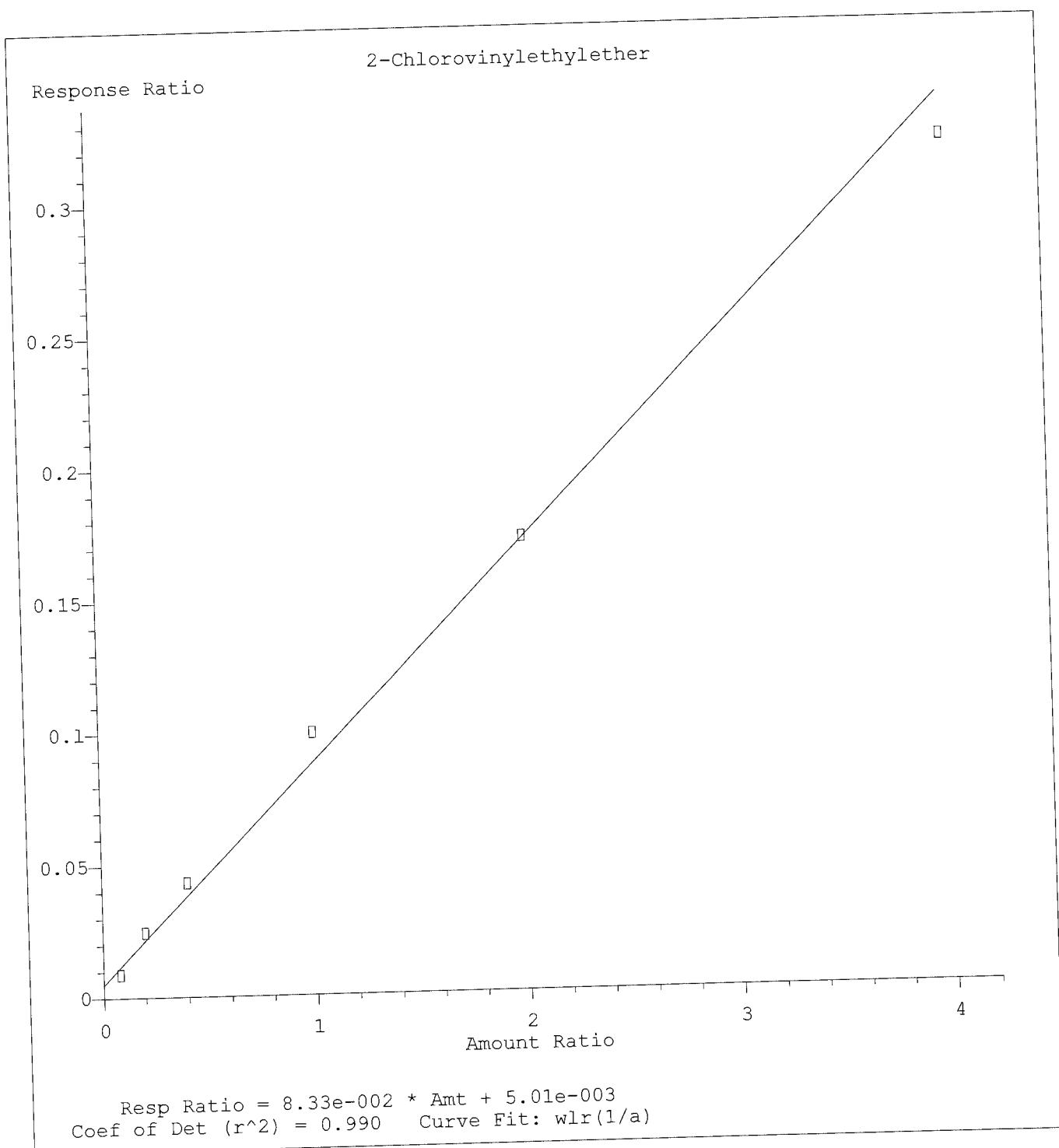
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

ms 4/1/11  
 2/18/11  
 36 of 280



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

37 of 280



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

M1/M1/M  
03/18/11  
✓38 of 280

## Injection Log

Directory: C:\HPCHEM1\GCMS7\DATA\031711

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03171101.d	1.	TUNE		17 Mar 2011 06:59
2	1	03171102.d	1.	TUNE		17 Mar 2011 07:16
3	16	03171103.d	1.	25 PPB CCV		17 Mar 2011 07:36
4	1	03171104.d	1.	BLANK		17 Mar 2011 08:10
5	2	03171105.d	1.	BLANK		17 Mar 2011 08:41
6	3	03171106.d	1.	0.5 PPB		17 Mar 2011 09:12
7	4	03171107.d	1.	1.0 PPB		17 Mar 2011 09:43
8	5	03171108.d	1.	2.0 PPB		17 Mar 2011 10:14
9	6	03171109.d	1.	5.0 PPB		17 Mar 2011 10:45
10	7	03171110.d	1.	10 PPB		17 Mar 2011 11:15
11	8	03171111.d	1.	25 PPB		17 Mar 2011 11:46
12	9	03171112.d	1.	50 PPB		17 Mar 2011 12:17
13	10	03171113.d	1.	100 PPB		17 Mar 2011 12:48
14	12	03171114.d	1.	200 PPB		17 Mar 2011 13:19
15	13	03171115.d	1.	SS		17 Mar 2011 13:50
16	16	03171116.d	1.	TERTIARY GAS		17 Mar 2011 14:20
17	1	03171117.d	1.	TUNE		17 Mar 2011 14:47
18	1	03171118.d	1.	25 PPB CCV		17 Mar 2011 15:06
19	2	03171119.d	1.	-BS1		17 Mar 2011 15:37
20	3	03171120.d	1.	-BSD1		17 Mar 2011 16:07
21	4	03171121.d	1.	-BLK1		17 Mar 2011 16:38
22	5	03171122.d	1.	PUC1019-01@16:20		17 Mar 2011 17:09
23	6	03171123.d	1.	PUC1019-02@16:22		17 Mar 2011 17:40
24	7	03171124.d	1.	PUC1025-02@16:25		17 Mar 2011 18:10
25	8	03171125.d	1.	PUC1025-01	5X	17 Mar 2011 18:41
26	9	03171126.d	1.	PUC1025-01	1X	17 Mar 2011 19:12
27	13	03171127.d	1.	PUC1025-01DUP1	1X	17 Mar 2011 19:43
28	16	03171128.d	1.	PUC0795-01		17 Mar 2011 20:13
29	1	03171129.d	1.	PUC0795-02		17 Mar 2011 20:44
30	2	03171130.d	1.	PUC0795-03		17 Mar 2011 21:15
31	3	03171131.d	1.	PUC0795-04		17 Mar 2011 21:46
32	4	03171132.d	1.	PUC0795-05		17 Mar 2011 22:17
33	5	03171133.d	1.	PUC0795-06		17 Mar 2011 22:48
34	6	03171134.d	1.	11C0657-MS1		17 Mar 2011 23:19
35	7	03171135.d	1.	11C0657-MSD1		17 Mar 2011 23:50
36	10	03171136.d	1.	BLK		18 Mar 2011 00:21
37	12	03171137.d	1.	BLK		18 Mar 2011 00:51

3/11/11  
OS(8)11

\39 of 280

TestAmerica  
Phoenix

# GC/MS 7 DAILY LOG SUMMARY

DATE: 03/17/11

ANALYST: LC

CALIBRATION METHOD(S): 031411.m

QC BATCH # (s): 11C0657, 11C0659

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\ 031711

New Curve - 031711.m

Page 1 of 2

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	03171101	Tune	2uL	N/A	8260B	H <sub>2</sub> O	DNU - incurred Std.
1	02	L	L				
16	03	25 PPB CCV	1x10mL				DNU - Acetone
1	04	Blank					DNU - Clean Out
2	05	L					
3	06	0.5 PPB					
4	07	1.0					
5	08	2.0					
6	09	5.0					
7	10	10					
8	11	25					
9	12	50					
10	13	100					
12	14	200					
13	15	SS					
16	16	Tertiary Gas	1x10cc		Air	Bromomethane 49%	
1	17	Tune	2uL		H <sub>2</sub> O		
1	18	25 PPB CCV	1x10mL				Acet 1
2	19	11C0657 - BS1					iodo, cd. ↑ 11C0659-BS1
3	20	-BS2					iodo ↑
4	21	-BLK1					BLK1
5	22	PLC0795-01A	1x10cc		Air	16:20	
6	23	L 02A					16:22
7	24	1025-02A					16:25
8	25	1025-01A @5X 2cc → 10cc					16:30
9	26	-01A @1X 1x10cc					16:27
13	27	-01 DUP 1					16:32 11C0657 - DL1A
16	28	PLC0795-01A	1x10mL	\$2	H <sub>2</sub> O	SOURCE	
1	29	02A		\$2			
2	30	03A		\$2			

## STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PU01537

CALIBRATION STD: 1525 / PU01528

Internal Std: 1522

IS/Surrogate/BFB: 1534 / PU01261

LOT #: 3<sup>o</sup> Gas: PT06459

## REQUIRED REVIEWS

### ARCHON REVIEWED

By / Date: LC 03/17/11

### SEQUENCE REVIEWED

40 of 280

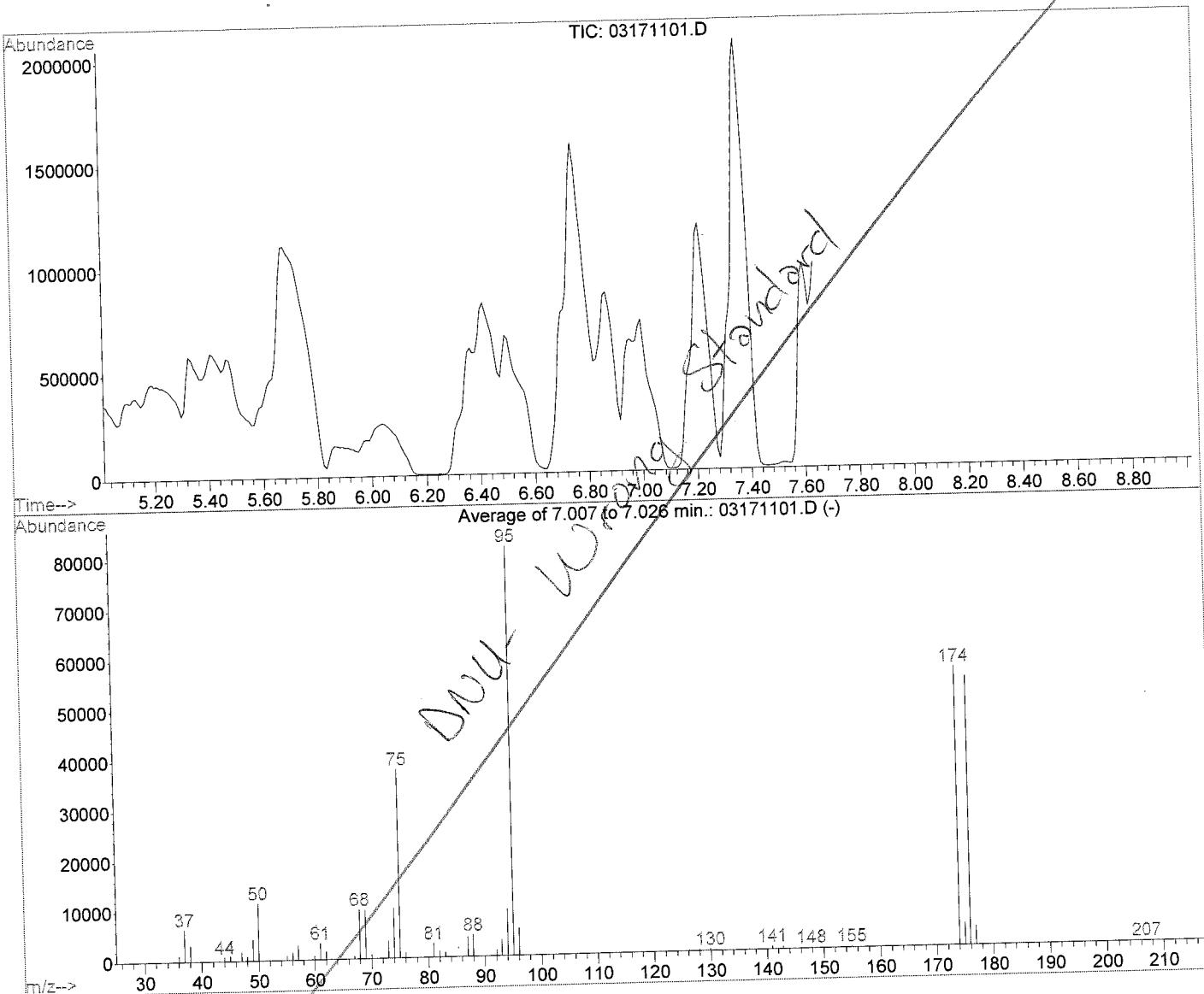
By / Date: LC 03/17/11

### FINAL REVIEWER / Date:

M 4/11/11

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171101.D Vial: 1  
 Acq On : 17 Mar 2011 6:59 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B



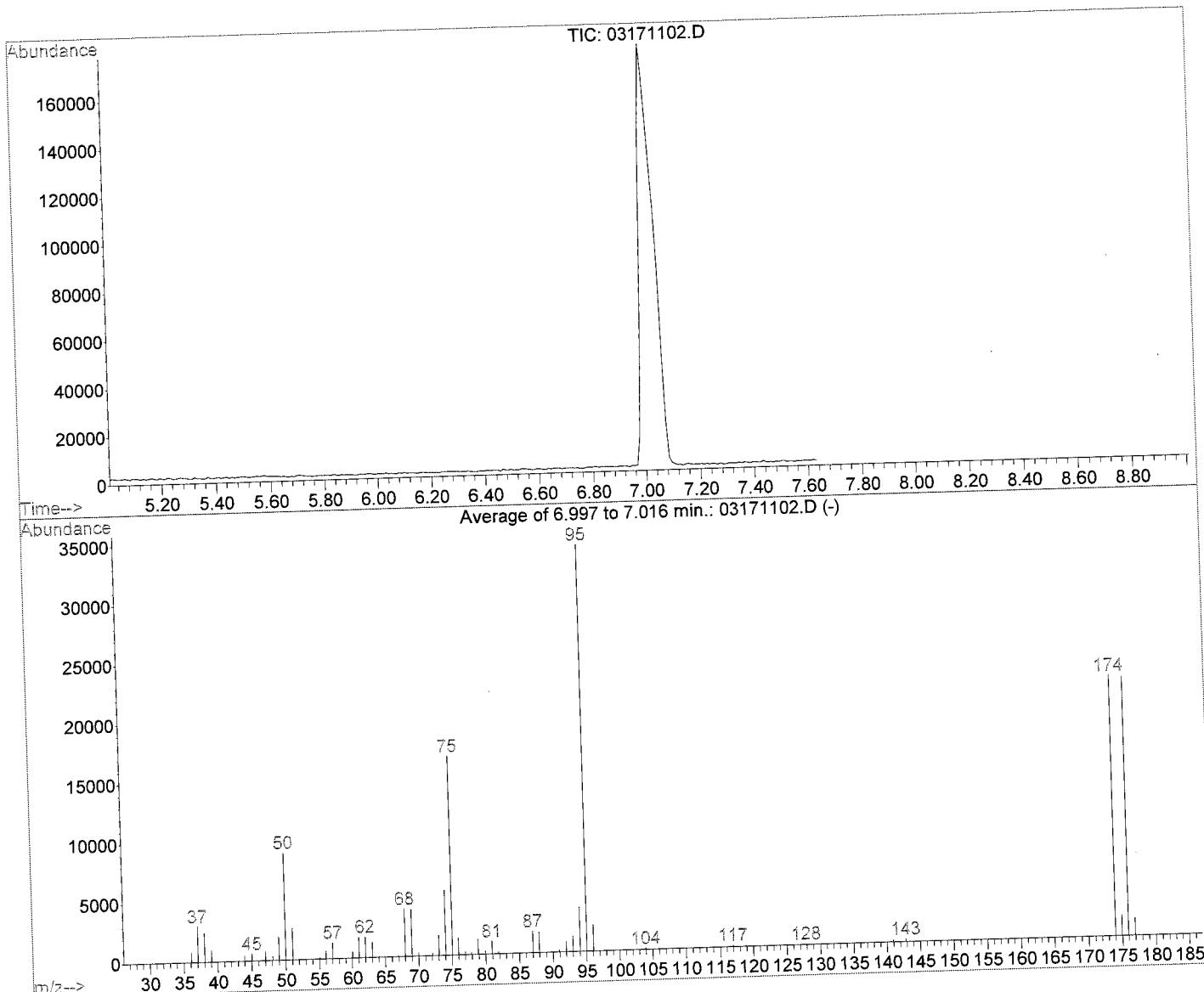
Spectrum Information: Average of 7.007 to 7.026 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	13.9	11317	FAIL*
75	95	30	60	46.1	37626	PASS
95	95	100	100	100.0	81675	PASS
96	95	5	9	6.6	5429	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.1	55616	PASS
175	174	5	9	7.8	4344	PASS
176	174	95	101	96.5	53661	PASS
177	176	5	9	6.7	3599	PASS

3/17/11  
41 of 280  
V.C.  
10/11

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171102.D Vial: 1  
 Acq On : 17 Mar 2011 7:16 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B



Spectrum Information: Average of 6.997 to 7.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.3	8966	PASS
75	95	30	60	48.9	16685	PASS
95	95	100	100	100.0	34109	PASS
96	95	5	9	6.4	2195	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.1	21869	PASS
175	174	5	9	7.8	1697	PASS
176	174	95	101	99.3	21715	PASS
177	176	5	9	6.7	1463	PASS

42 of 280

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	183444	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	325784	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	270420	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	118494	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Dibromofluoromethane	10.09	113	106054	24.28	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.12%	
39) Toluene-d8	14.11	98	384866	24.78	ug/L	0.00
Spiked Amount 25.000			Recovery	=	99.12%	
53) 4-Bromofluorobenzene	17.75	95	134955	24.39	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.56%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	203514	22.97	ug/L	100
3) Chloromethane	4.90	50	349427	27.92	ug/L	100
4) Vinyl chloride	5.19	62	318799	26.09	ug/L	99
5) Bromomethane	5.78	94	141014	26.05	ug/L	96
6) Chloroethane	5.99	64	169039	25.83	ug/L	97
7) Trichlorofluoromethane	6.48	101	229398	25.07	ug/L	99
8) Acetone	6.93	43	87501	Below Cal		97
9) Iodomethane	7.58	142	98773	23.31	ug/L	98
10) 1,1-Dichloroethene	7.52	96	122197	26.18	ug/L	94
11) Methylene chloride	7.71	84	141233	23.11	ug/L	100
12) Freon 113	7.78	101	141514	23.82	ug/L	99
13) Carbon disulfide	8.03	76	424756	25.69	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	133127	23.44	ug/L	97
15) MTBE	8.73	73	229415	23.89	ug/L	98
16) 1,1-Dichloroethane	8.92	63	275296	23.59	ug/L	99
17) Vinyl acetate	9.08	43	220376	24.39	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7147	23.08	ug/L	98
19) cis-1,2-Dichloroethene	9.66	96	138298	23.44	ug/L	97
20) Bromochloromethane	9.87	128	51964	23.76	ug/L	100
21) Chloroform	9.93	83	226993	23.52	ug/L	99
22) 2,2-Dichloropropane	10.03	77	199254	24.74	ug/L	99
24) 1,2-Dichloroethane	10.78	62	137605	24.05	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	172734	23.93	ug/L	99
27) 1,1-Dichloropropene	11.15	75	199034	23.87	ug/L	99
28) Carbon tetrachloride	11.39	117	140086	24.16	ug/L	99
29) Benzene	11.44	78	525784	23.82	ug/L	100
30) Dibromomethane	12.17	93	59810	22.72	ug/L	99
31) 1,2-Dichloropropane	12.21	63	147015	23.80	ug/L	100
32) Trichloroethene	12.26	95	130559	23.47	ug/L	100
33) Bromodichloromethane	12.33	83	152627	23.43	ug/L	97
34) 2-Chlorovinylethylether	12.86	63	34857	23.00	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	192256	24.47	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	79041	22.82	ug/L	98
37) trans-1,3-Dichloropropene	13.73	75	148191	24.15	ug/L	98
38) 1,1,2-Trichloroethane	13.95	83	69853	23.20	ug/L	96
40) Toluene	14.21	92	301555	24.42	ug/L	99
42) 1,3-Dichloropropane	14.27	76	144303	23.31	ug/L	100

(#= qualifier out of range (m)= manual integration)

03171103.D 031411.M Thu Mar 17 13:54:27 2011

43 of 280

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	52512	24.58	ug/L	# 99
44) Dibromochloromethane	14.65	129	85525	24.04	ug/L	98
45) 1,2-Dibromoethane	14.98	107	75677	25.06	ug/L	99
46) Tetrachloroethene	15.20	166	116159	23.97	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	93416	24.16	ug/L	98
48) Chlorobenzene	16.12	112	306146	24.04	ug/L	97
49) Ethylbenzene	16.38	91	563689	24.00	ug/L	99
50) m,p-Xylenes	16.64	106	197842	23.89	ug/L	100
51) Styrene	17.09	104	313010	24.57	ug/L	100
52) o-Xylene	17.19	106	188426	23.54	ug/L	100
55) Bromoform	16.81	173	45375	27.10	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	85826	24.73	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	19634	26.45	ug/L	97
58) Isopropylbenzene	17.70	105	467417	25.22	ug/L	100
59) Bromobenzene	18.05	156	105243	25.16	ug/L	98
60) n-Propylbenzene	18.30	91	657511	25.12	ug/L	100
61) 2-Chlorotoluene	18.44	91	374515	24.85	ug/L	99
62) 4-Chlorotoluene	18.55	91	377509	25.07	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	397648	25.20	ug/L	99
64) tert-Butylbenzene	19.09	119	338640	25.00	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	398096	24.77	ug/L	98
66) sec-Butylbenzene	19.38	105	570587	24.77	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	211237	24.59	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	208652	24.28	ug/L	100
69) p-Isopropyltoluene	19.61	119	450706	25.20	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	179425	24.69	ug/L	99
71) n-Butylbenzene	20.11	91	503050	25.42	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	11007	24.17	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	125573	24.32	ug/L	99
74) Naphthalene	22.62	128	162763	24.75	ug/L	100
75) Hexachlorobutadiene	22.68	225	79503	27.59	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	100849	23.50	ug/L	98

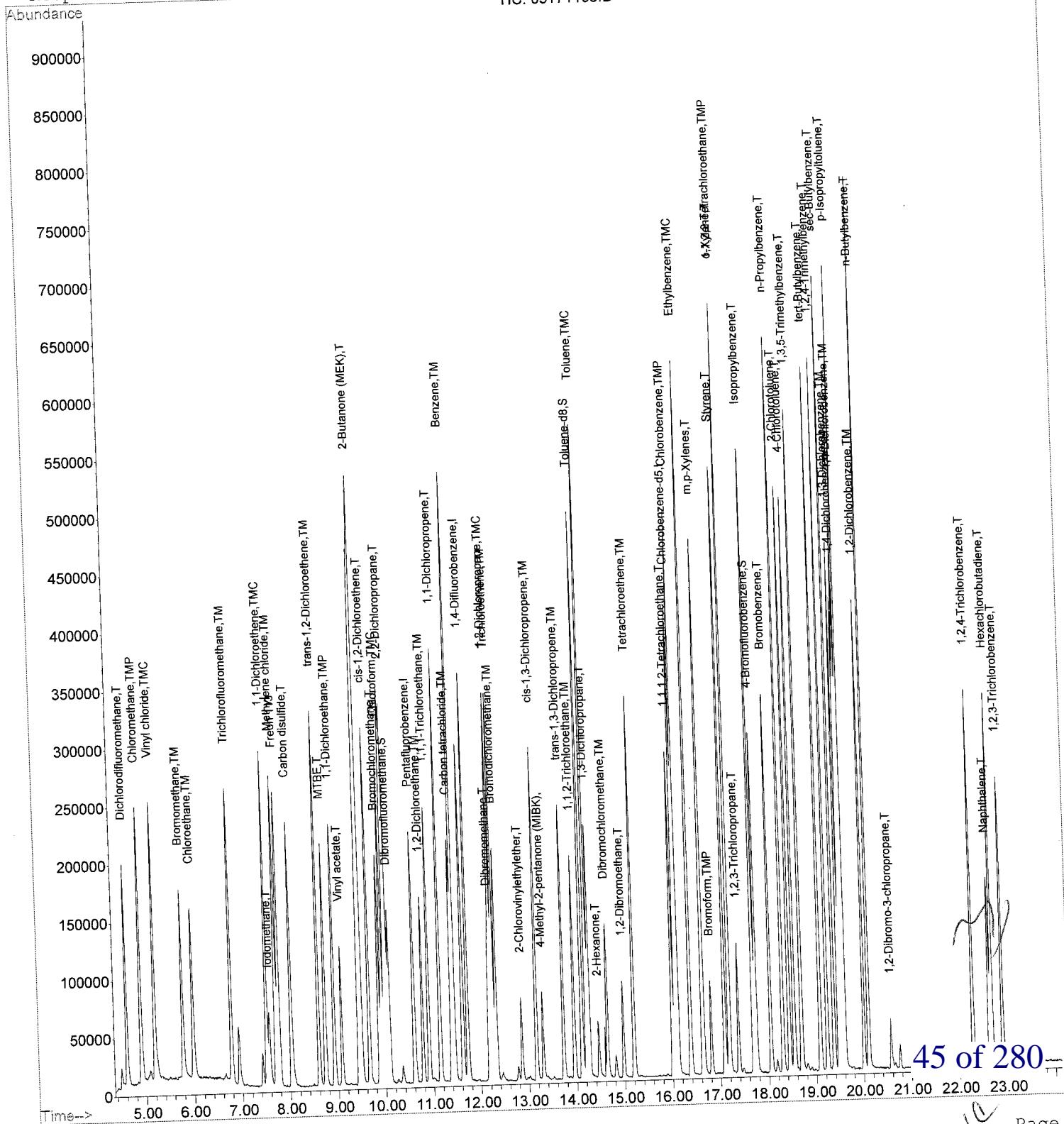
44 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171103.D



45 of 280

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	208596	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	368454	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	303623	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	134043	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	111829	22.51	ug/L	0.00
Spiked Amount	25.000			Recovery	=	90.04%
39) Toluene-d8	14.11	98	400008	22.77	ug/L	0.00
Spiked Amount	25.000			Recovery	=	91.08%
53) 4-Bromofluorobenzene	17.75	95	138919	22.36	ug/L	0.00
Spiked Amount	25.000			Recovery	=	89.44%

## Target Compounds

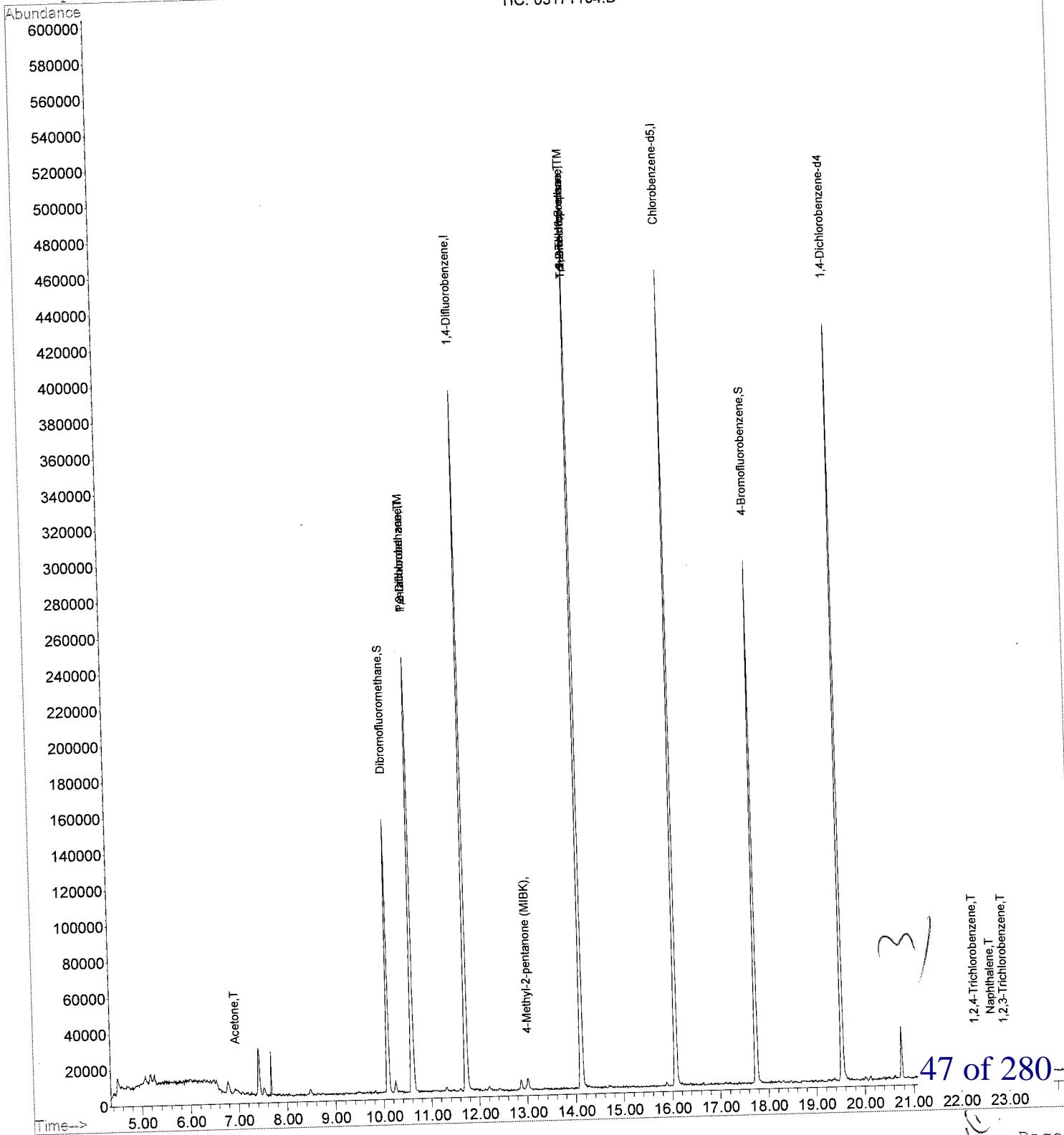
					Qvalue	
8) Acetone	6.94	48	4324	1.42	ug/L	# 65
10) 1,1-Dichloroethene	7.51	96	60	Below Cal	#	73
13) Carbon disulfide	8.03	76	742	Below Cal		100
24) 1,2-Dichloroethane	10.60	62	1046	0.16	ug/L	# 1
36) 4-Methyl-2-pentanone (MIBK)	13.01	43	7775	1.98	ug/L	# 50
38) 1,1,2-Trichloroethane	14.12	83	373	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.11	76	4467	0.64	ug/L	# 68
73) 1,2,4-Trichlorobenzene	22.29	180	1153	0.20	ug/L	97
74) Naphthalene	22.63	128	8429	1.13	ug/L	100
76) 1,2,3-Trichlorobenzene	22.91	180	1057	0.22	ug/L	93

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171104.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

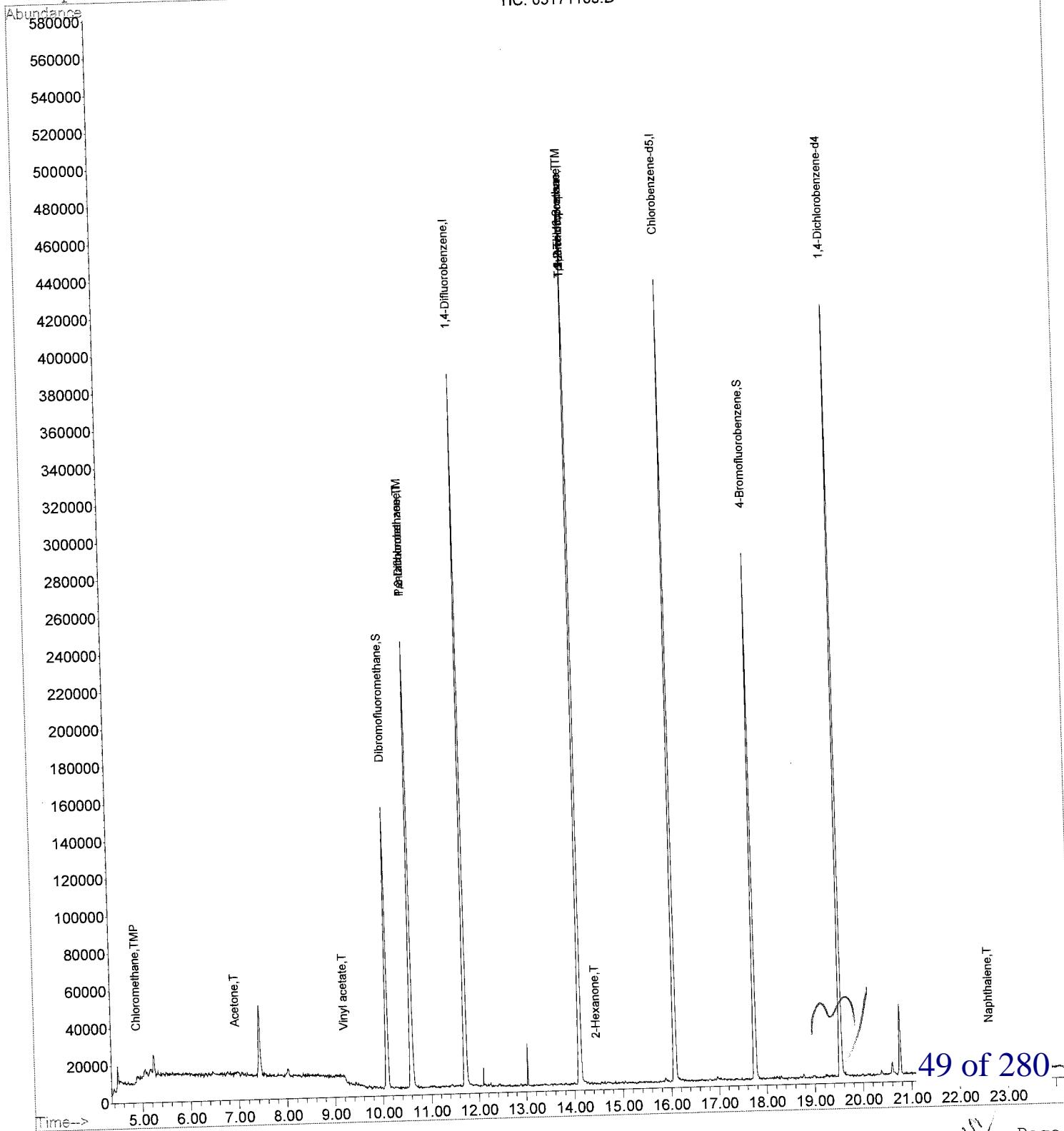
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	110687	24.00	ug/L	0.00
Spiked Amount 25.000				Recovery =	96.00%	
39) Toluene-d8	14.11	98	374753	22.97	ug/L	0.00
Spiked Amount 25.000				Recovery =	91.88%	
53) 4-Bromofluorobenzene	17.75	95	131653	22.85	ug/L	0.00
Spiked Amount 25.000				Recovery =	91.40%	
Target Compounds				Qvalue		
3) Chloromethane	4.89	50	1791	0.14	ug/L	LRL 98
8) Acetone	6.93	43	3328	0.96	ug/L	# 69
10) 1,1-Dichloroethene	7.53	96	127	Below Cal	# 1	
13) Carbon disulfide	8.02	76	5282	Below Cal	# 100	
17) Vinyl acetate	9.19	43	944	0.10	ug/L	# 82
24) 1,2-Dichloroethane	10.60	62	1206	0.20	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11	ug/L	# WRT 70
42) 1,3-Dichloropropane	14.12	76	3863	0.60	ug/L	# LRL 32
43) 2-Hexanone	14.46	43	235	0.11	ug/L	# LRL 100
74) Naphthalene	22.63	128	1667	0.23	ug/L	

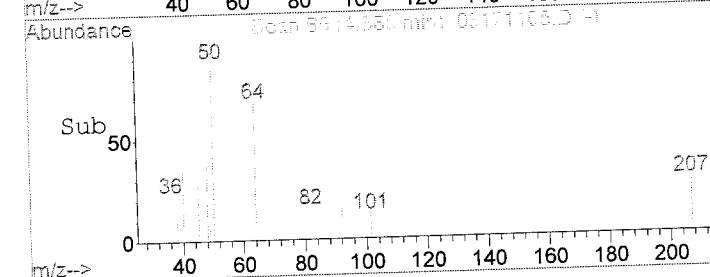
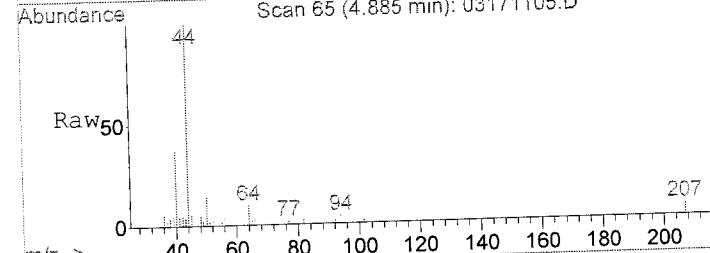
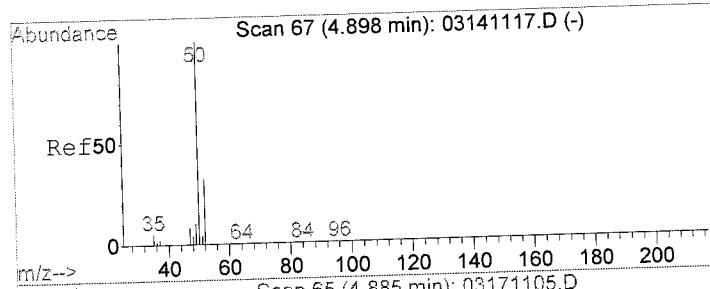
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

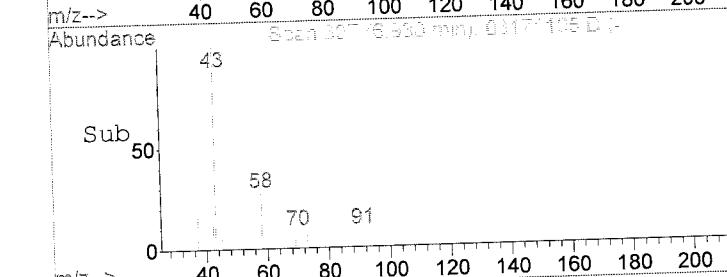
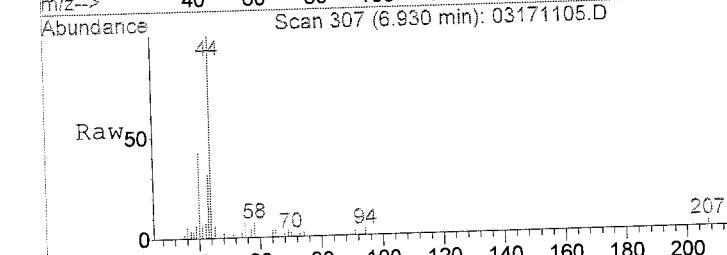
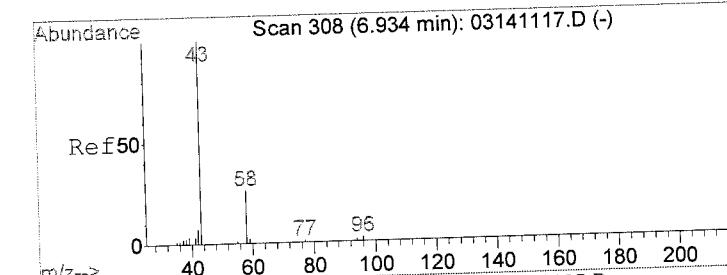
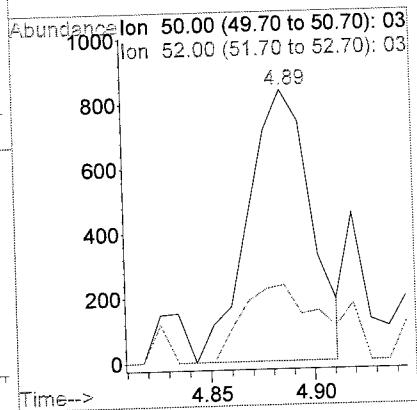
TIC: 03171105.D





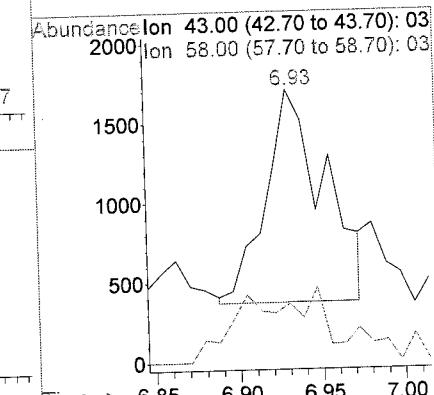
#3  
 Chloromethane  
 Concen: 0.14 ug/L  
 RT: 4.89 min Scan# 65  
 Delta R.T. -0.01 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 50 Resp: 1791  
 Ion Ratio Lower Upper  
 50 100  
 52 32.7 25.4 38.2

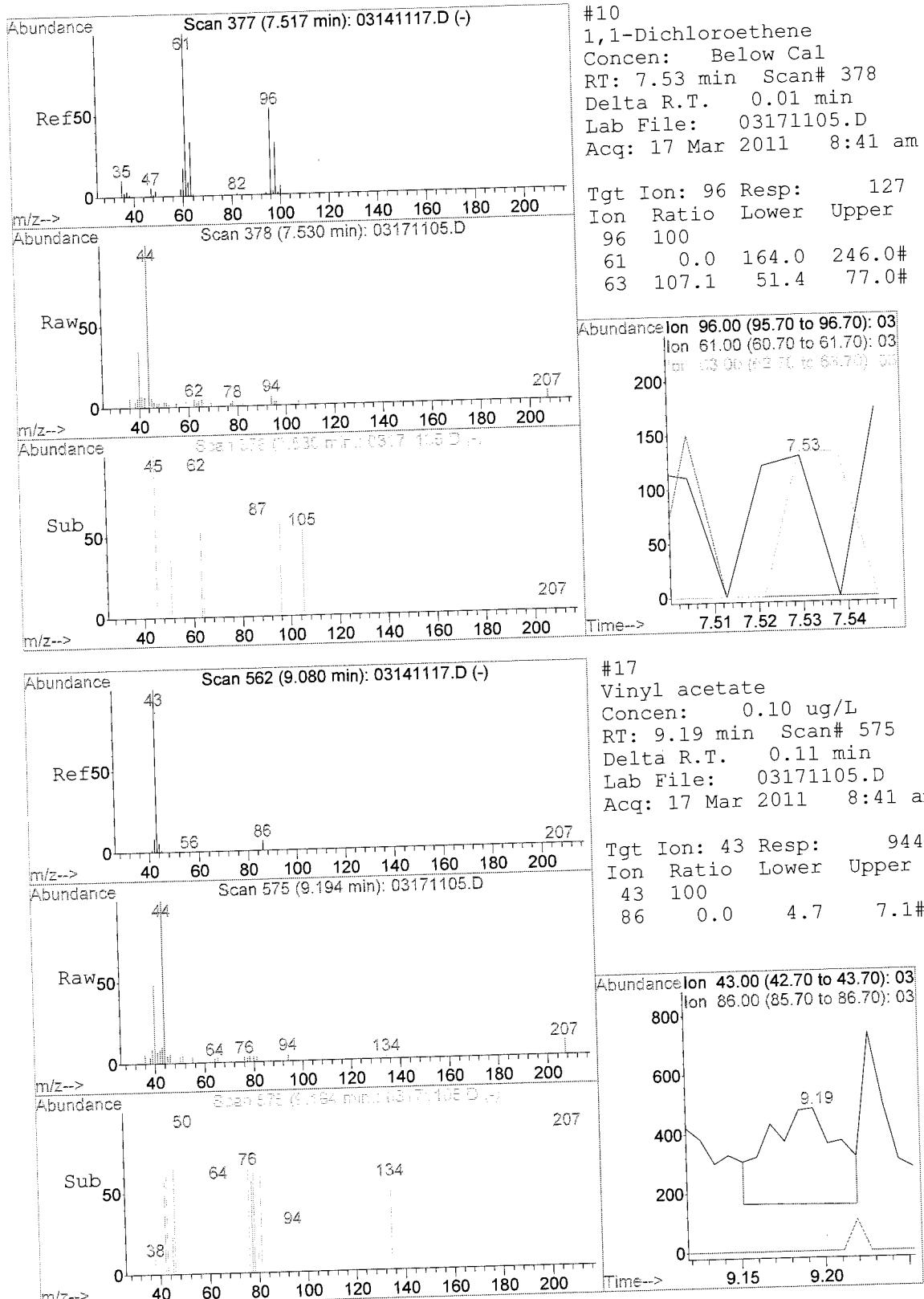


#8  
 Acetone  
 Concen: 0.96 ug/L  
 RT: 6.93 min Scan# 307  
 Delta R.T. -0.00 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 43 Resp: 3328  
 Ion Ratio Lower Upper  
 43 100  
 58 9.7 20.4 30.6#



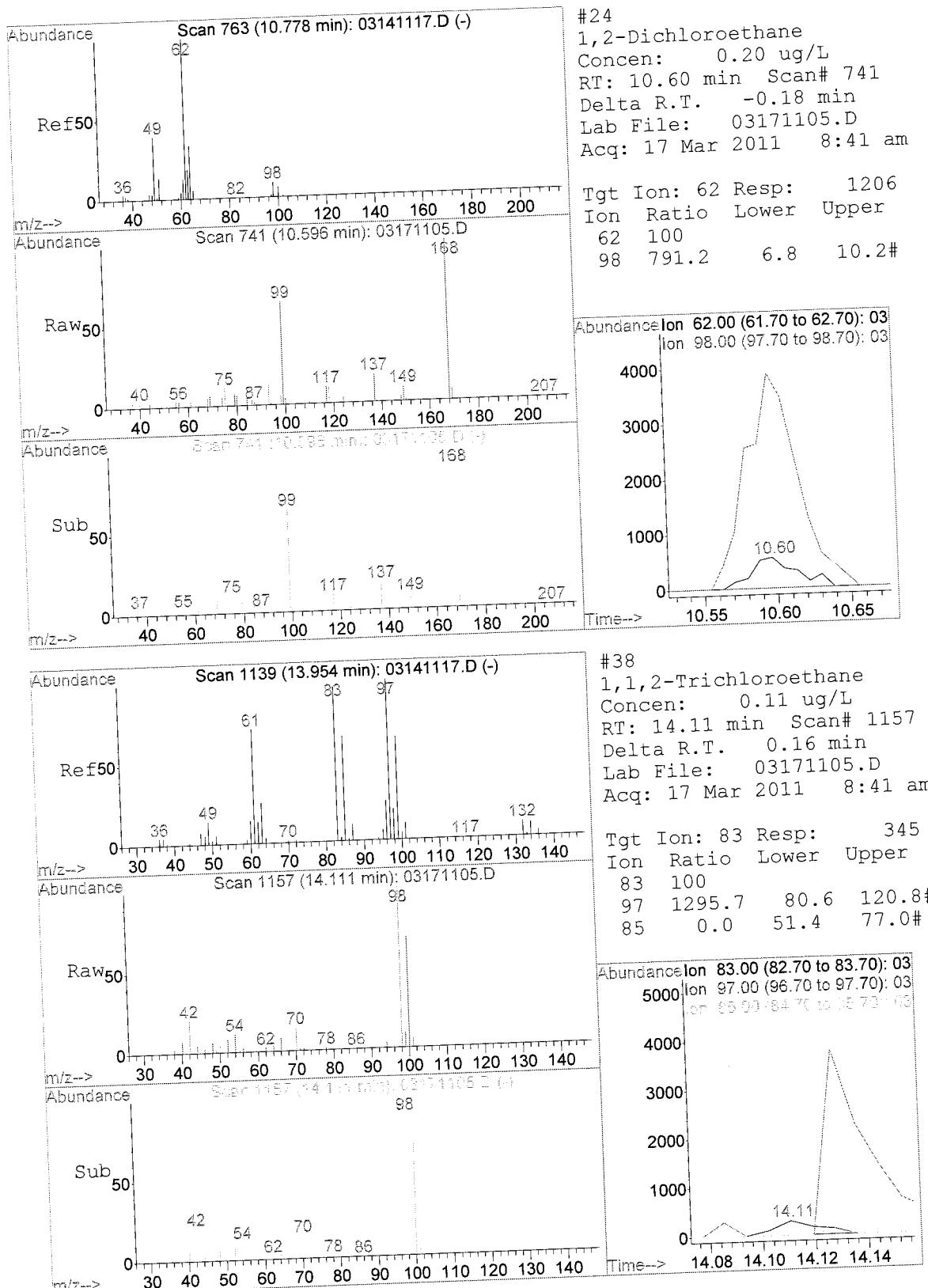
50 of 280

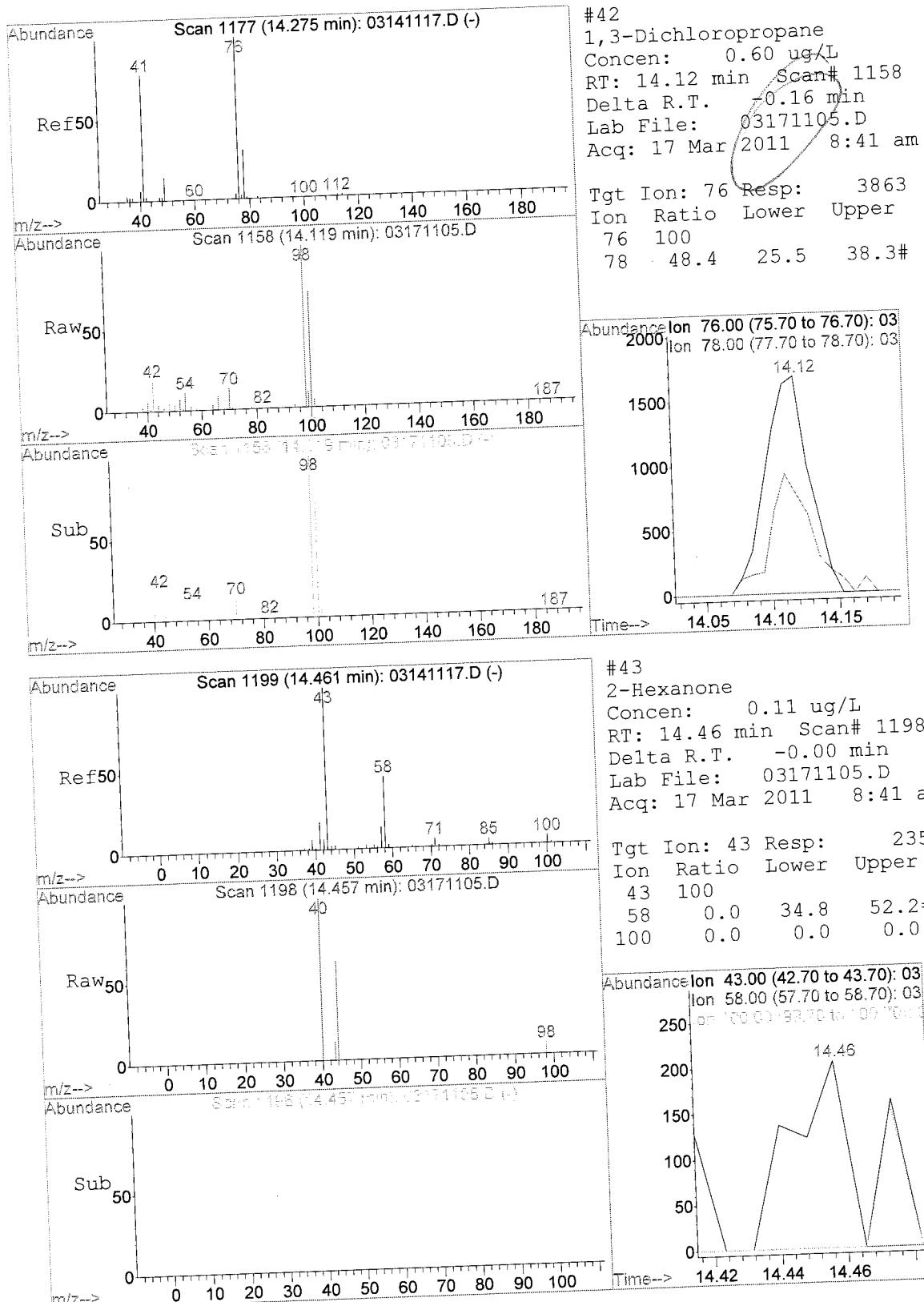


M  
V

51 of 280

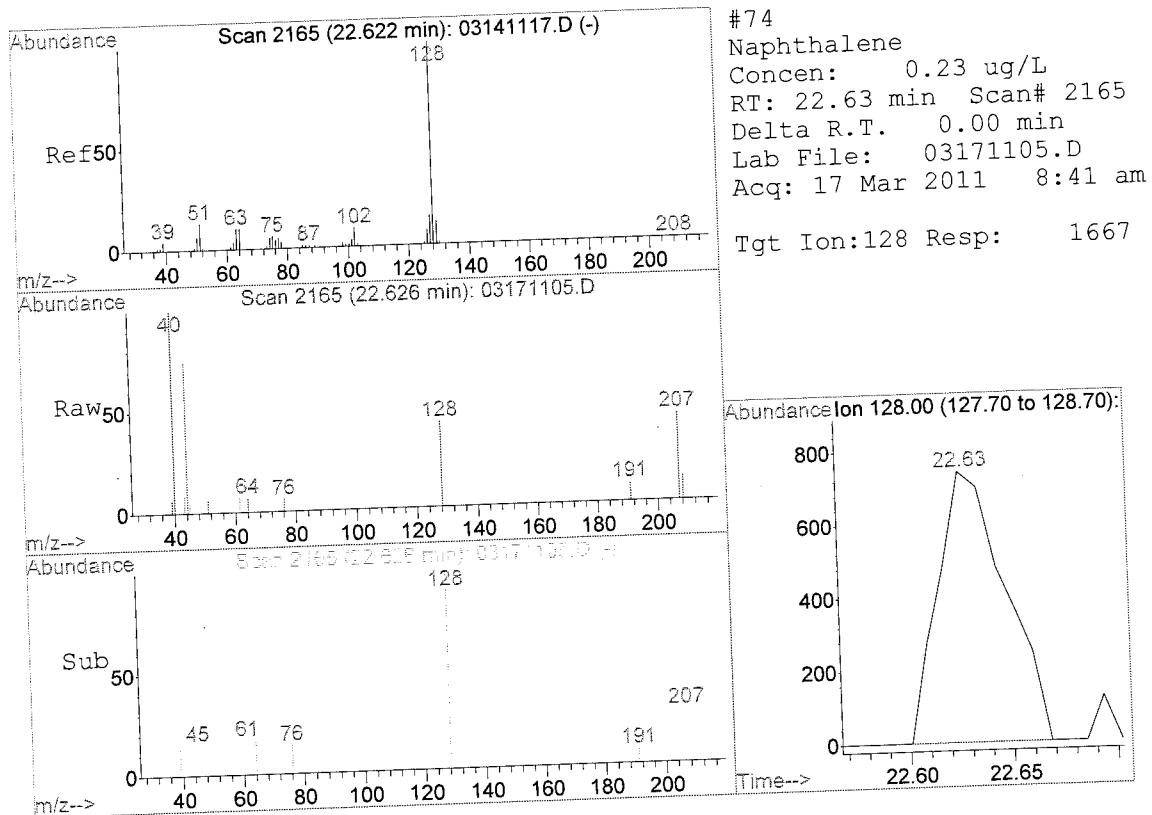
V





53 of 280

WPT



~

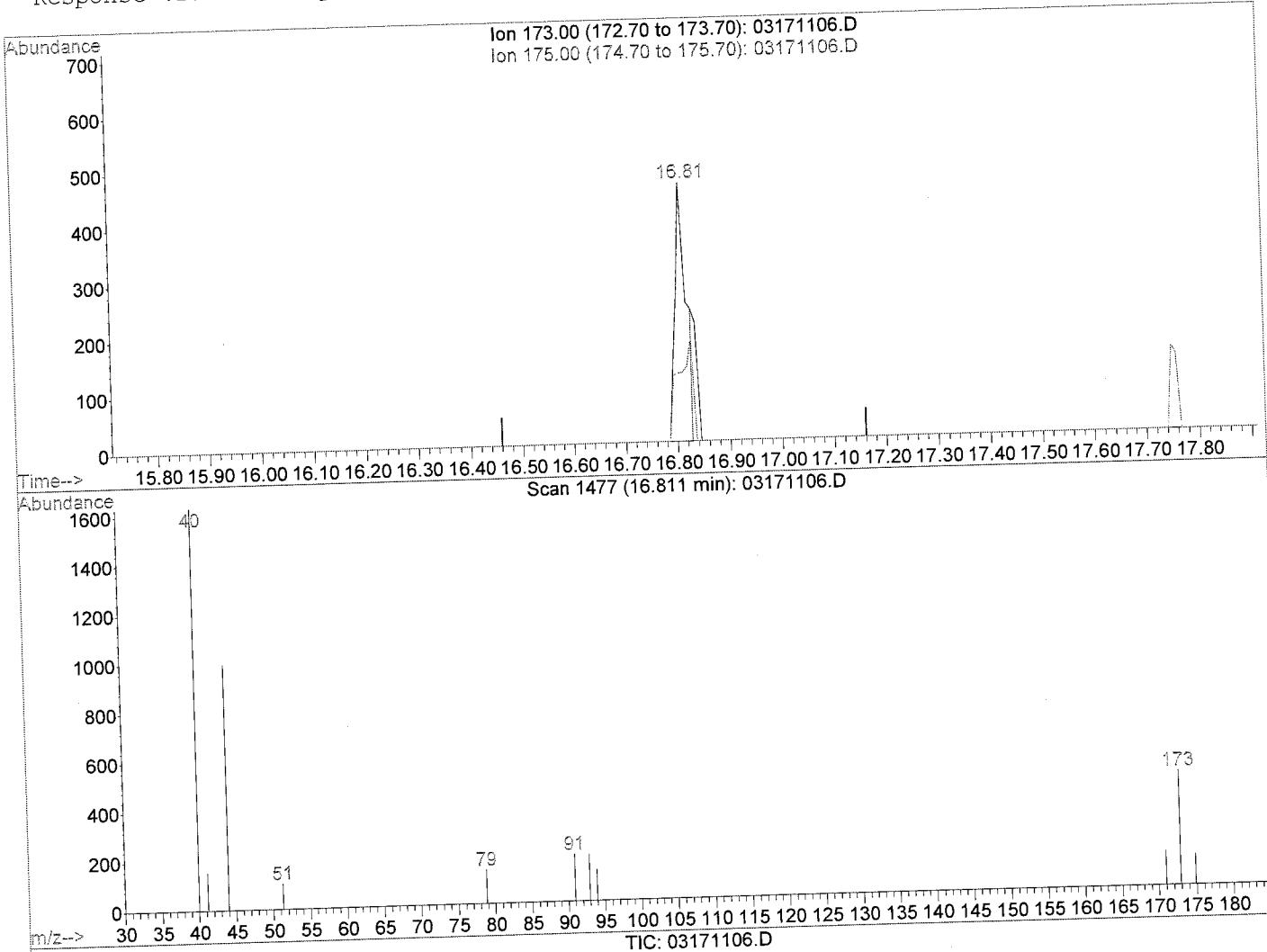
54 of 280



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:55 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.42ug/L

response 696

Ion	Exp%	Act%
173.00	100	100
175.00	50.90	23.13#
0.00	0.00	0.00
0.00	0.00	0.00

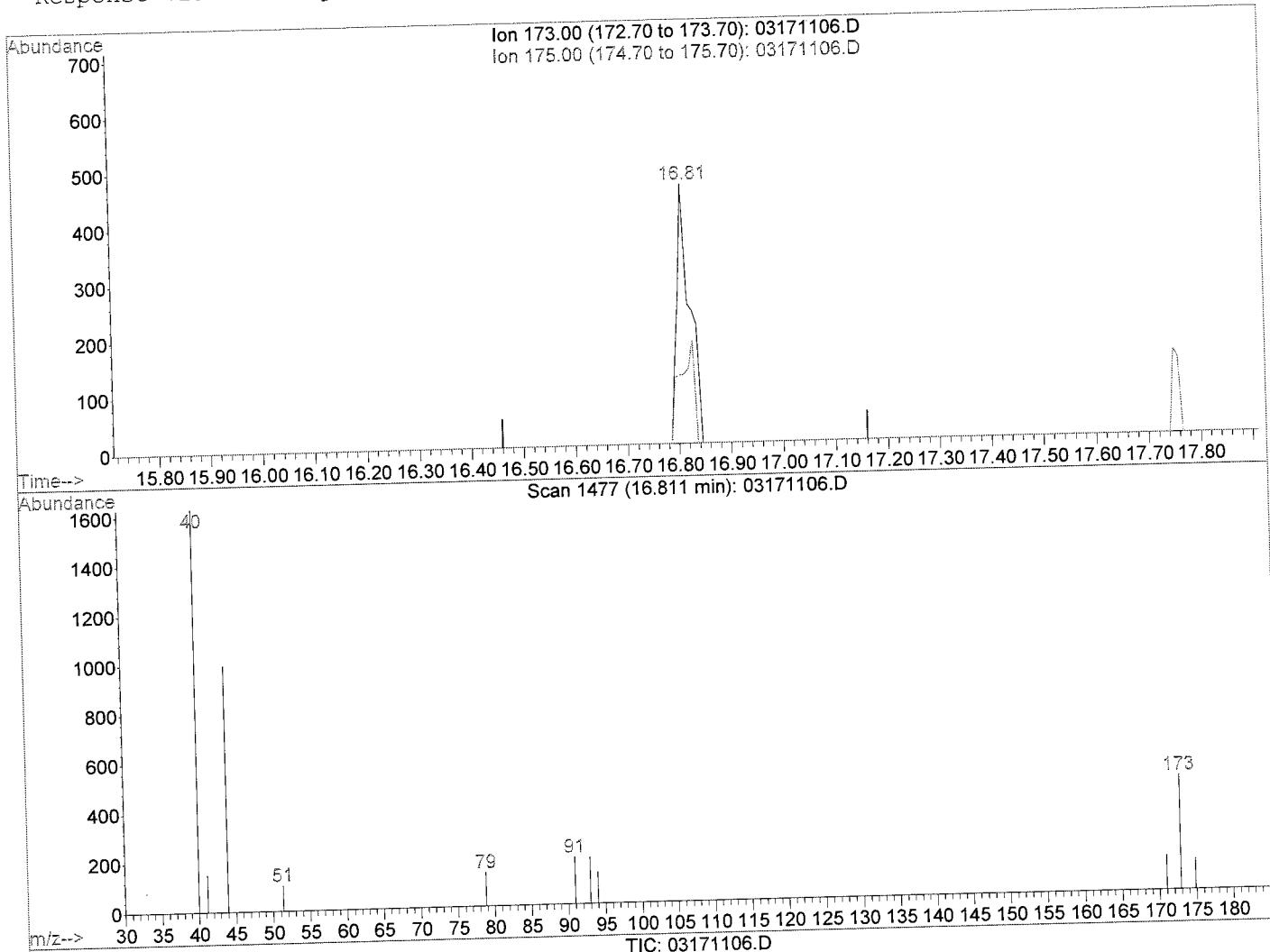
Before - SP

55 of 280

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.49ug/L m

response 803

Ion	Exp%	Act%
173.00	100	100
175.00	50.90	20.05#
0.00	0.00	0.00
0.00	0.00	0.00

After

56 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	2490	0.62	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.48%	
39) Toluene-d8	14.12	98	8971	0.63	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.52%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.65	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.60%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	4286	0.53	ug/L	92
3) Chloromethane	4.89	50	6587	0.58	ug/L	96
4) Vinyl chloride	5.18	62	6003	0.54	ug/L	90
5) Bromomethane	5.78	94	3084	0.62	ug/L	90
6) Chloroethane	5.97	64	3371	0.56	ug/L	# 75
7) Trichlorofluoromethane	6.77	101	4364	0.52	ug/L	93
8) Acetone	0.00	43	0	N.D.	d	
9) Iodomethane	7.58	142	1272	0.33	ug/L	95
10) 1,1-Dichloroethene	7.50	96	2883	0.40	ug/L	91
11) Methylene chloride	7.70	84	3890	0.70	ug/L	95
12) Freon 113	7.77	101	3509	0.65	ug/L	93
13) Carbon disulfide	8.02	76	10027	0.34	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 91
15) MTBE	8.73	73	5033	0.57	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.56	ug/L	97
17) Vinyl acetate	9.08	43	4816	0.58	ug/L	# 82
18) 2-Butanone (MEK)	9.46	72	199	0.70	ug/L	# 33
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	89
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 90
21) Chloroform	9.93	83	4941	0.56	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.52	ug/L	98
24) 1,2-Dichloroethane	10.77	62	2927	0.56	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.50	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	96
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.55	ug/L	100
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 86
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	99
32) Trichloroethene	12.27	95	2709	0.53	ug/L	97
33) Bromodichloromethane	12.33	83	3018	0.51	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	0.56	ug/L	# 56
35) cis-1,3-Dichloropropene	13.18	75	3500	0.49	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	0.00	43	0	N.D.	d	
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.50	ug/L	# 82
40) Toluene	14.21	92	6374	0.56	ug/L	98
42) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031411.M Thu Mar 17 13:56:36 2011

3/8/11  
57 of 280  
Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	0.00	43	0	N.D.	d	84
44) Dibromochloromethane	14.65	129	2052	0.64	ug/L	76
45) 1,2-Dibromoethane	14.98	107	1293	0.48	ug/L	#
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.59	ug/L	#
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.56	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.60	ug/L	94
51) Styrene	17.10	104	5086	0.44	ug/L	#
52) o-Xylene	17.20	106	4214	0.58	ug/L	99
55) Bromoform	16.81	173	803m	0.49	ug/L	
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	#
57) 1,2,3-Trichloropropane	17.38	110	276	0.38	ug/L	#
58) Isopropylbenzene	17.70	105	9284	0.51	ug/L	98
59) Bromobenzene	18.05	156	1904	0.47	ug/L	85
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	96
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.52	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.50	ug/L	97
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.51	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	94
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	87
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	#
69) p-Isopropyltoluene	19.61	119	8395	0.48	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.55	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.49	ug/L	99
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	d	
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.42	ug/L	81
74) Naphthalene	22.63	128	4307	0.67	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	Below Cal	#	66
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.46	ug/L	87

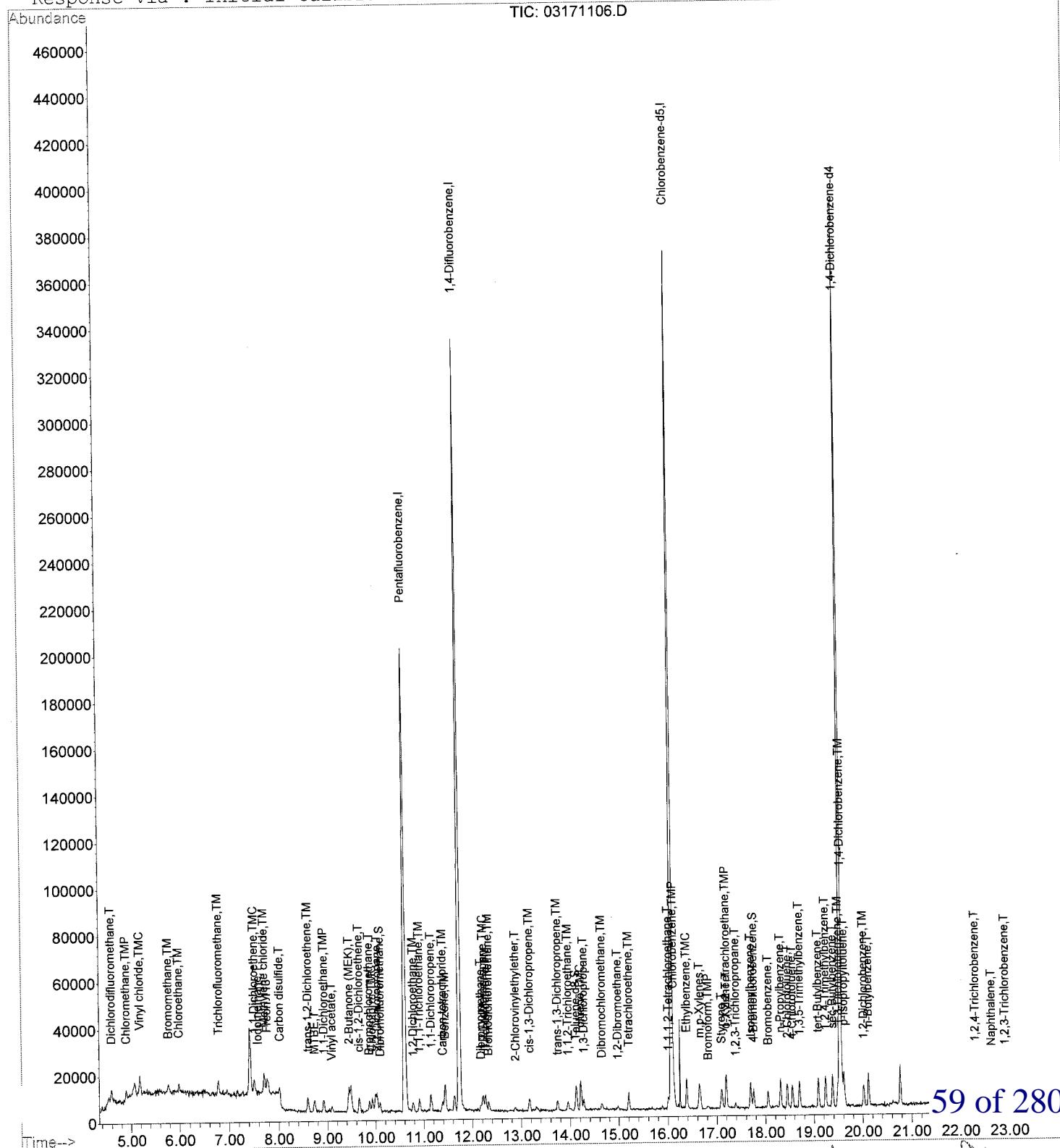
58 of 280

V

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011 Quant Results File: 031411.RES

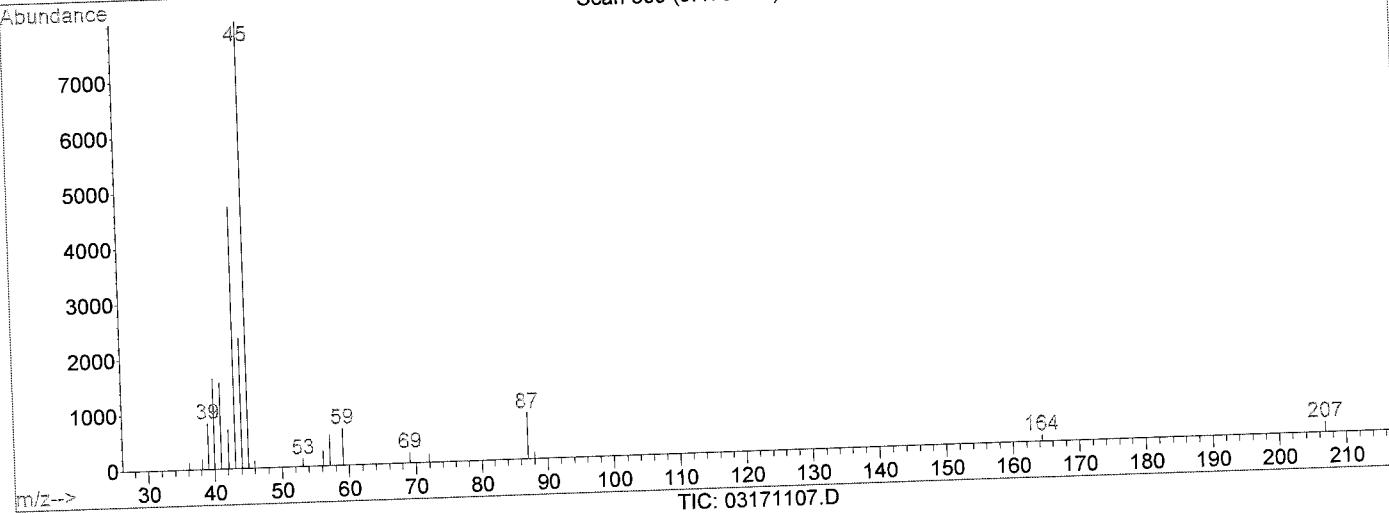
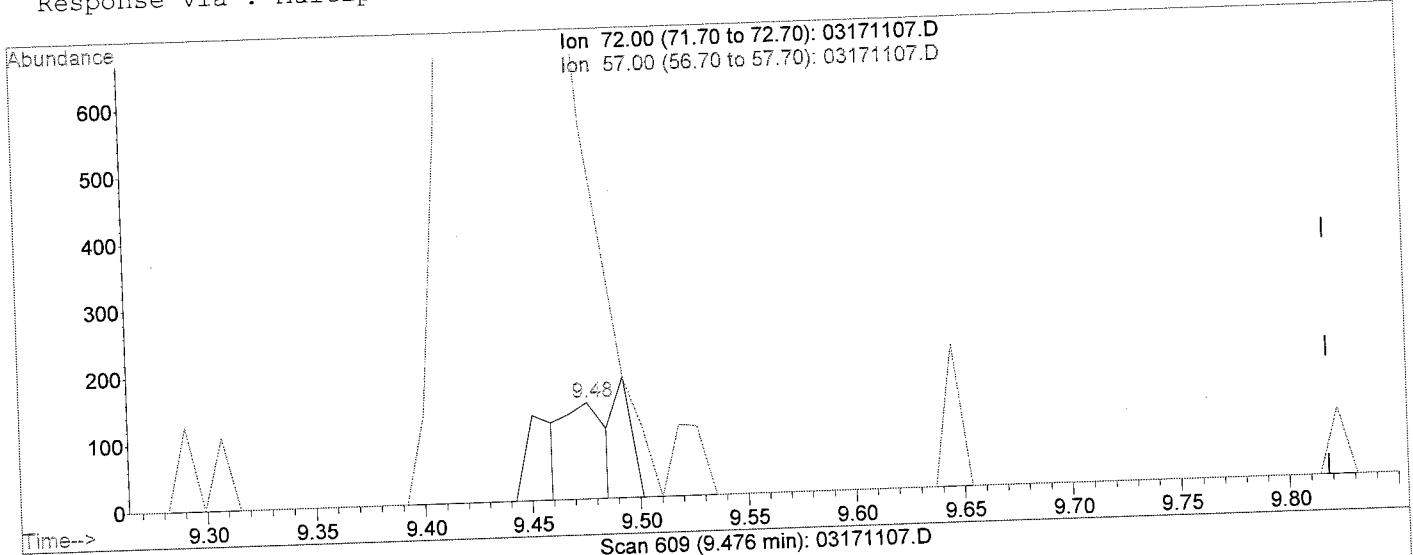
Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.48min 0.69ug/L

response 190

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

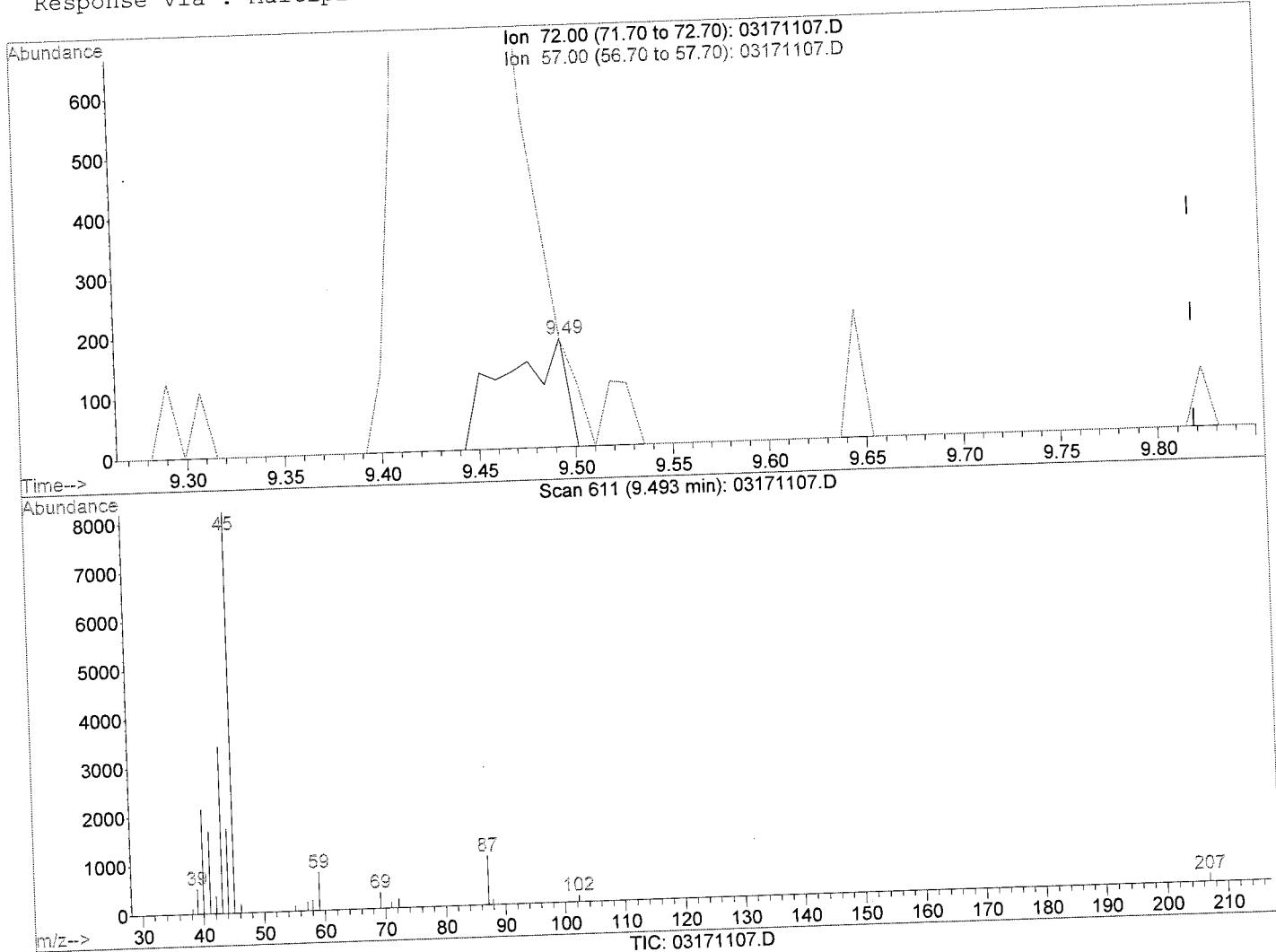
Before - NIP

60 of 280

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T )

9.49min 1.46ug/L m

response 405

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

After

61 of 280  
2/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:57 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	3898	1.00	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.00%		
39) Toluene-d8	14.12	98	14880	1.07	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.28%		
53) 4-Bromofluorobenzene	17.76	95	5477	1.10	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.40%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.58	85	7417	0.94	ug/L	95
3) Chloromethane	4.89	50	11297	1.01	ug/L	99
4) Vinyl chloride	5.18	62	11731	1.07	ug/L #	84
5) Bromomethane	5.77	94	5200	1.07	ug/L	90
6) Chloroethane	5.98	64	6815	1.17	ug/L	90
7) Trichlorofluoromethane	6.77	101	8152	1.00	ug/L	92
8) Acetone	0.00	43	0	N.D. d		
9) Iodomethane	7.57	142	3864	1.02	ug/L #	83
10) 1,1-Dichloroethene	7.51	96	5486	1.05	ug/L	95
11) Methylene chloride	7.70	84	6767	1.24	ug/L	93
12) Freon 113	7.78	101	6284	1.18	ug/L	96
13) Carbon disulfide	8.02	76	17829	0.89	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.20	ug/L	83
15) MTBE	8.73	73	10605	1.24	ug/L #	88
16) 1,1-Dichloroethane	8.92	63	12255	1.17	ug/L #	97
17) Vinyl acetate	9.09	43	9903	1.23	ug/L #	92
18) 2-Butanone (MEK)	9.49	72	405m	1.46	ug/L	
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L	96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L	99
21) Chloroform	9.93	83	8465	0.98	ug/L	92
22) 2,2-Dichloropropane	10.03	77	6968	0.97	ug/L	
24) 1,2-Dichloroethane	10.78	62	5936	1.16	ug/L #	76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.95	ug/L	95
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L #	94
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L	98
29) Benzene	11.44	78	20409	1.03	ug/L	98
30) Dibromomethane	12.17	93	2529	1.07	ug/L	96
31) 1,2-Dichloropropane	12.21	63	5383	0.97	ug/L #	88
32) Trichloroethene	12.26	95	4847	0.97	ug/L	95
33) Bromodichloromethane	12.32	83	5644	0.97	ug/L	87
34) 2-Chlorovinylideneether	12.86	63	1739	1.28	ug/L #	82
35) cis-1,3-Dichloropropene	13.18	75	6952	0.99	ug/L	94
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.11	ug/L #	89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.97	ug/L #	82
40) Toluene	14.22	92	10459	0.94	ug/L	91
42) 1,3-Dichloropropene	14.27	76	5543	0.99	ug/L #	73

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

62 of 280  
 11/8/11

VC

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: 031411.RES

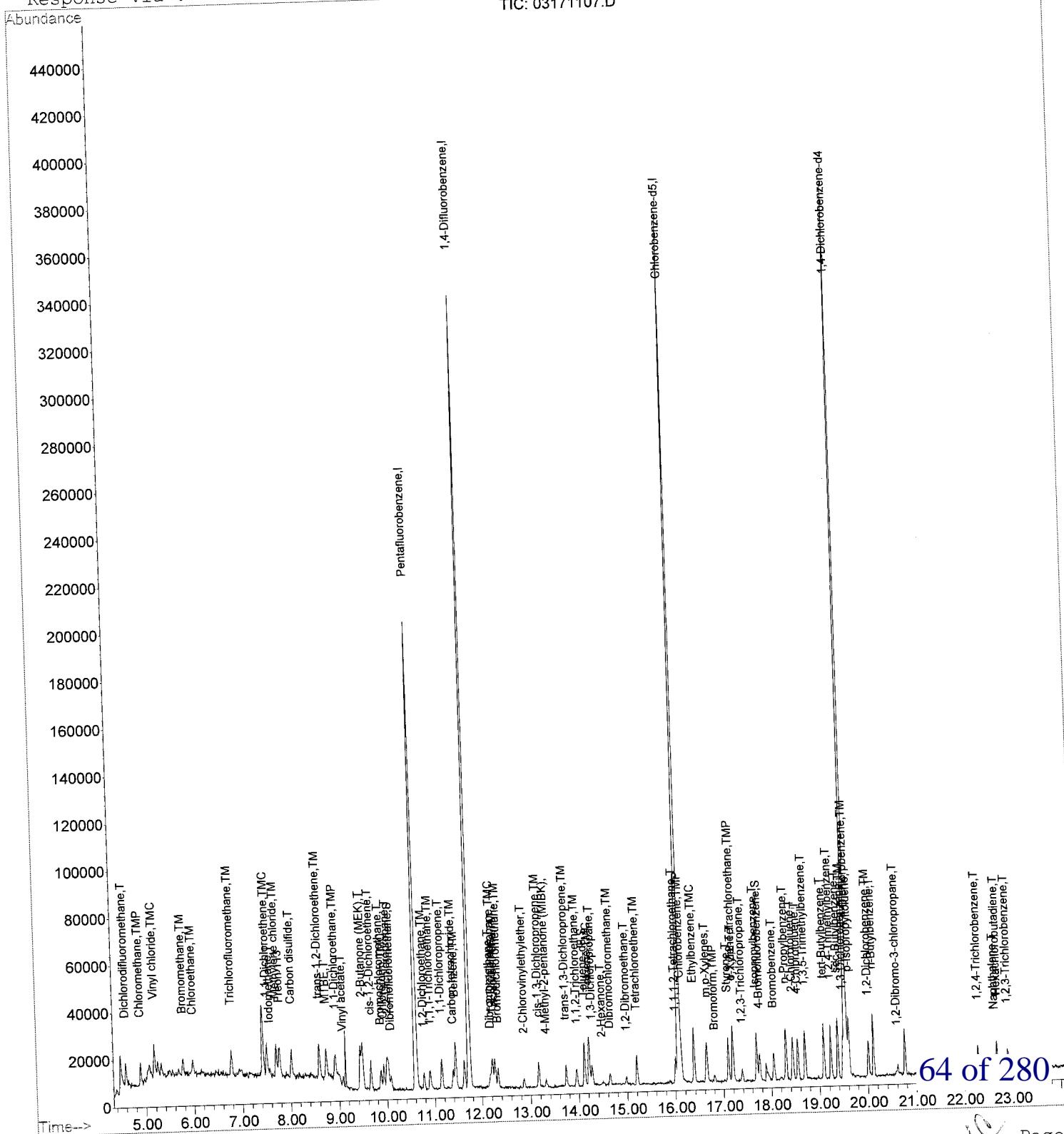
Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.31	ug/L	# 77
44) Dibromochloromethane	14.65	129	2863	0.89	ug/L	98
45) 1,2-Dibromoethane	14.98	107	2446	0.90	ug/L	# 78
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	93
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.03	ug/L	# 58
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	92
49) Ethylbenzene	16.38	91	20598	0.97	ug/L	99
50) m,p-Xylenes	16.64	106	6910	0.93	ug/L	92
51) Styrene	17.10	104	10355	0.90	ug/L	98
52) o-Xylene	17.20	106	7210	1.00	ug/L	90
55) Bromoform	16.81	173	1545	0.97	ug/L	# 72
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L	# 89
57) 1,2,3-Trichloropropane	17.38	110	807	1.14	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.92	ug/L	100
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.96	ug/L	99
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.94	ug/L	96
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.95	ug/L	100
66) sec-Butylbenzene	19.38	105	21187	0.96	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	93
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	98
69) p-Isopropyltoluene	19.61	119	15312	0.90	ug/L	98
70) 1,2-Dichlorobenzene	20.02	146	6687	0.96	ug/L	99
71) n-Butylbenzene	20.11	91	17346	0.92	ug/L	96
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.90	ug/L	89
73) 1,2,4-Trichlorobenzene	22.28	180	4683	0.95	ug/L	94
74) Naphthalene	22.63	128	5978	0.95	ug/L	100
75) Hexachlorobutadiene	22.68	225	2850	0.43	ug/L	90
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.84	ug/L	94

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 13:57 2011

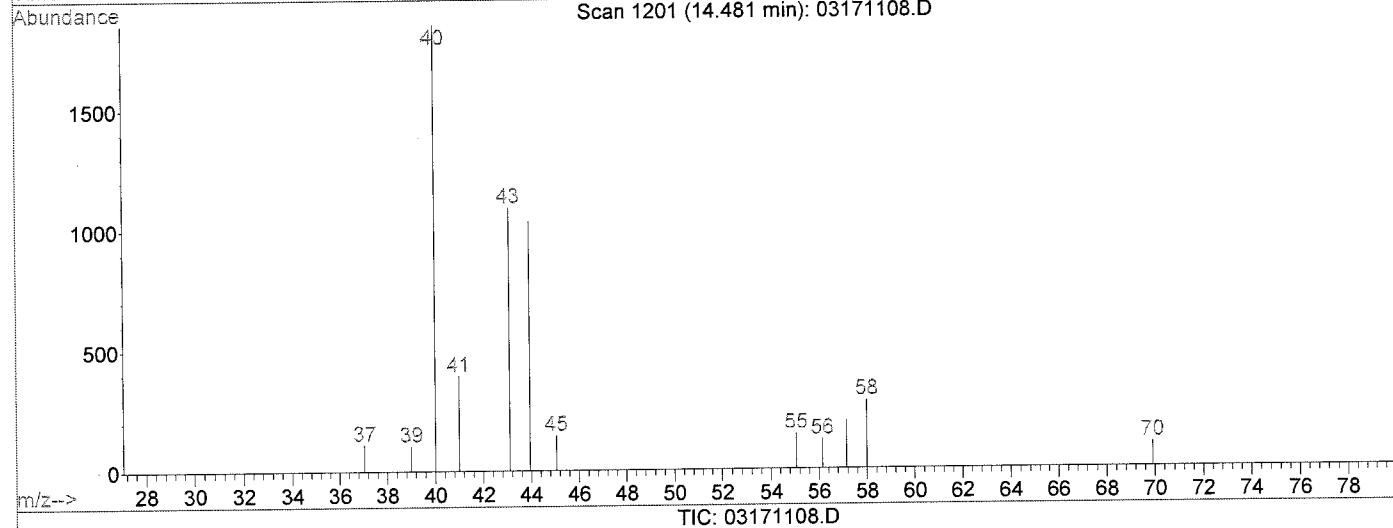
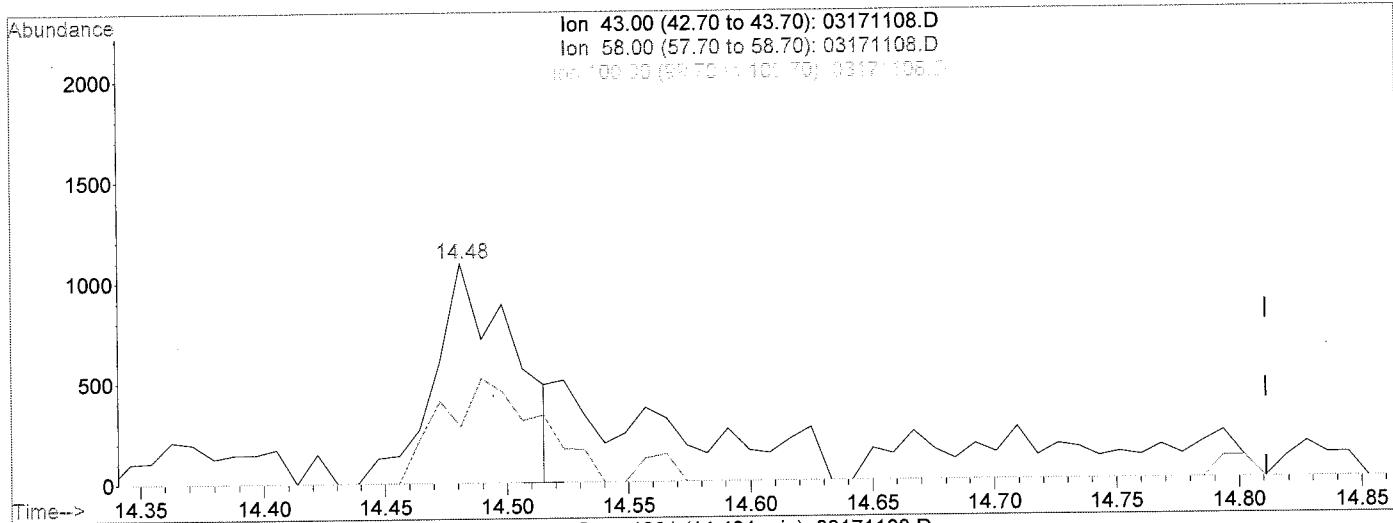
Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.28ug/L

response 2474

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	39.81
100.00	0.00	0.00
0.00	0.00	0.00

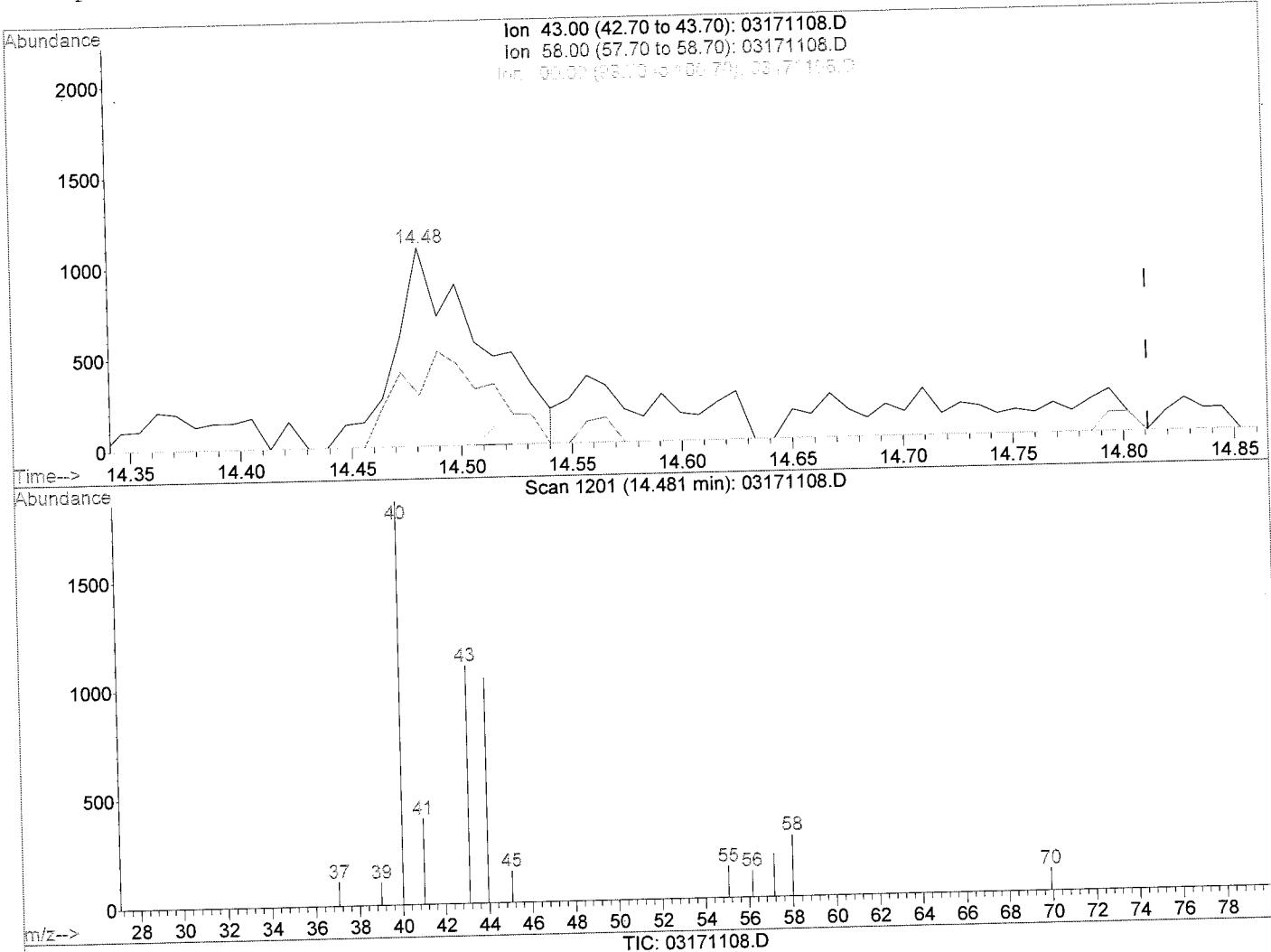
Before - Nit

65 of 280

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T )

14.48min 1.55ug/L m

response 2999

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	32.84#
100.00	0.00	0.00
0.00	0.00	0.00

After

66 of 280

✓

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	7767	1.95	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.80%		
39) Toluene-d8	14.12	98	28802	2.04	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.16%		
53) 4-Bromofluorobenzene	17.75	95	10411	2.08	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.32%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	15723	1.95	ug/L	94
3) Chloromethane	4.89	50	22795	2.00	ug/L	97
4) Vinyl chloride	5.18	62	22297	2.00	ug/L	95
5) Bromomethane	5.77	94	6970	1.41	ug/L	95
6) Chloroethane	5.98	64	11754	1.97	ug/L #	85
7) Trichlorofluoromethane	6.78	101	16143	1.94	ug/L	100
8) Acetone	6.94	43	4997	2.62	ug/L	97
9) Iodomethane	7.57	142	5343	1.38	ug/L	96
10) 1,1-Dichloroethene	7.51	96	8308	1.69	ug/L	98
11) Methylene chloride	7.71	84	10726	1.93	ug/L	97
12) Freon 113	7.77	101	10221	1.89	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.70	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.85	ug/L	97
15) MTBE	8.73	73	16615	1.90	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.93	ug/L	99
17) Vinyl acetate	9.08	43	14566	1.77	ug/L #	95
18) 2-Butanone (MEK)	9.47	72	179	0.63	ug/L #	1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.03	ug/L	91
20) Bromochloromethane	9.88	128	3627	1.82	ug/L	89
21) Chloroform	9.93	83	18162	2.07	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.91	ug/L	96
24) 1,2-Dichloroethane	10.78	62	10721	2.06	ug/L #	94
25) 1,1,1-Trichloroethane	10.91	97	12034	1.83	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	99
28) Carbon tetrachloride	11.38	117	9830	1.86	ug/L	94
29) Benzene	11.44	78	39494	1.97	ug/L	99
30) Dibromomethane	12.17	93	4597	1.92	ug/L	90
31) 1,2-Dichloropropane	12.22	63	10960	1.95	ug/L #	94
32) Trichloroethene	12.27	95	9761	1.93	ug/L	94
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	96
34) 2-Chlorovinylethylether	12.87	63	2637	1.91	ug/L #	85
35) cis-1,3-Dichloropropene	13.16	75	13465	1.88	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.68	ug/L #	94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.85	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.91	ug/L	94
40) Toluene	14.21	92	22811	2.03	ug/L	97
42) 1,3-Dichloropropane	14.28	76	10418	1.86	ug/L	92

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031411.M Thu Mar 17 13:59:31 2011

3/11/11

03/11/11

67 of 280

V

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2999m	1.55	ug/L	97
44) Dibromochloromethane	14.65	129	6238	1.94	ug/L	97
45) 1,2-Dibromoethane	14.99	107	5443	1.99	ug/L #	100
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.94	ug/L	95
48) Chlorobenzene	16.12	112	21803	1.89	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.91	ug/L	99
50) m,p-Xylenes	16.64	106	14567	1.95	ug/L	99
51) Styrene	17.09	104	21955	1.91	ug/L	100
52) o-Xylene	17.19	106	14080	1.95	ug/L	98
55) Bromoform	16.81	173	2978	1.87	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	95
57) 1,2,3-Trichloropropane	17.40	110	1450	2.05	ug/L	99
58) Isopropylbenzene	17.69	105	34246	1.94	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	99
60) n-Propylbenzene	18.30	91	47531	1.91	ug/L	99
61) 2-Chlorotoluene	18.44	91	27642	1.93	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	97
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.90	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.89	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.92	ug/L	96
66) sec-Butylbenzene	19.38	105	43119	1.97	ug/L	96
67) 1,3-Dichlorobenzene	19.48	146	16064	1.97	ug/L	96
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	97
69) p-Isopropyltoluene	19.61	119	32053	1.88	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	13744	1.99	ug/L	99
71) n-Butylbenzene	20.12	91	35106	1.86	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.24	ug/L #	75
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.70	ug/L	96
74) Naphthalene	22.63	128	10824	1.73	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.50	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.72	ug/L	94

7)

68 of 280

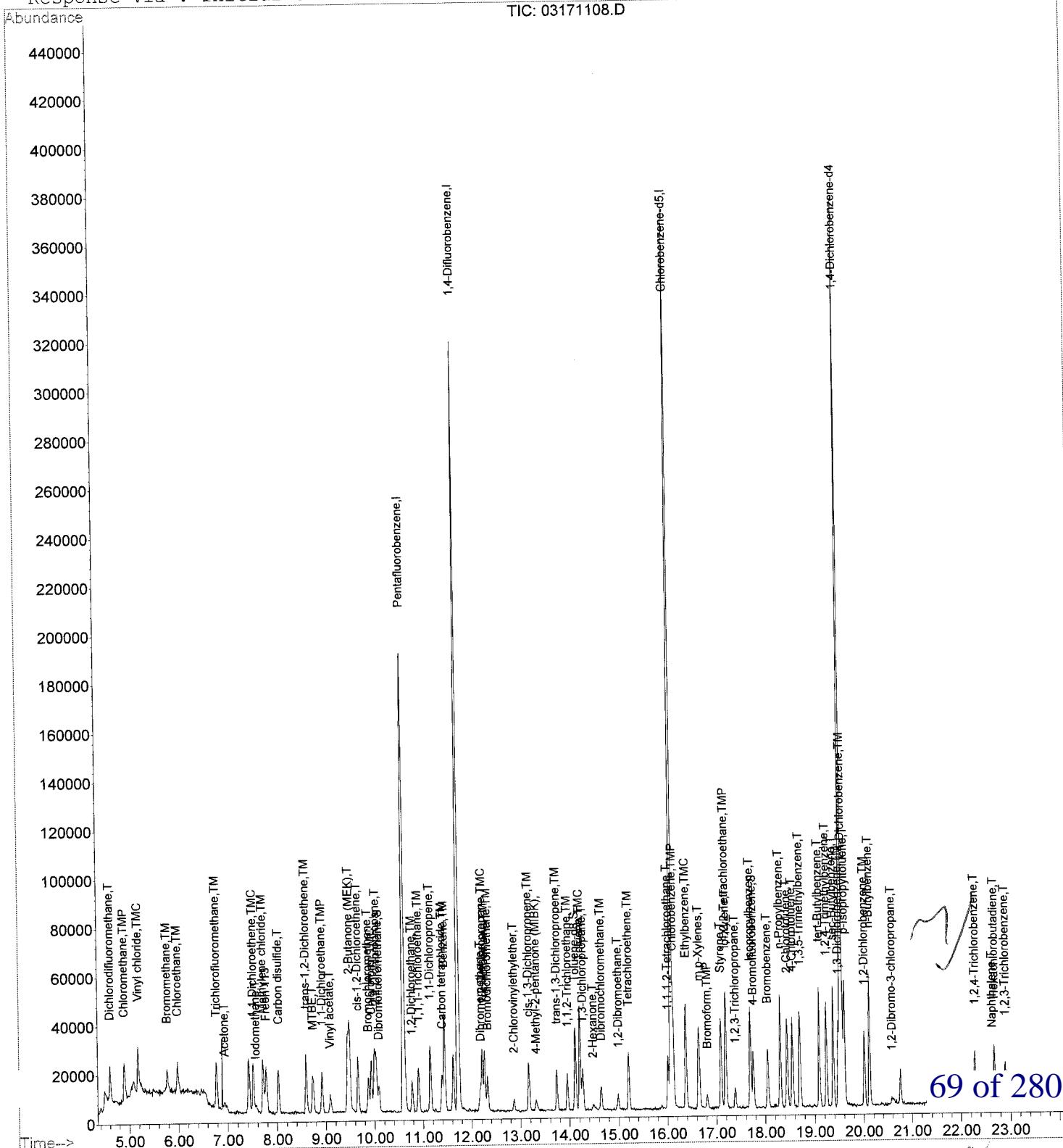
V

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171108.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	22772	5.84	ug/L	0.00
Spiked Amount 25.000			Recovery =	23.36%		
39) Toluene-d8	14.12	98	75601	5.34	ug/L	0.00
Spiked Amount 25.000			Recovery =	21.36%		
53) 4-Bromofluorobenzene	17.75	95	27636	5.46	ug/L	0.00
Spiked Amount 25.000			Recovery =	21.84%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	43993	5.56	ug/L	98
3) Chloromethane	4.90	50	69304	6.20	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.46	ug/L	97
5) Bromomethane	5.77	94	23286	4.82	ug/L	97
6) Chloroethane	5.98	64	31380	5.37	ug/L	97
7) Trichlorofluoromethane	6.78	101	44900	5.49	ug/L	98
8) Acetone	6.94	43	8551	5.67	ug/L	96
9) Iodomethane	7.57	142	19144	5.06	ug/L	100
10) 1,1-Dichloroethene	7.51	96	23635	5.45	ug/L	96
11) Methylene chloride	7.71	84	29505	5.41	ug/L	98
12) Freon 113	7.78	101	28220	5.32	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.39	ug/L	89
15) MTBE	8.74	73	47481	5.54	ug/L	98
16) 1,1-Dichloroethane	8.92	63	57409	5.51	ug/L	100
17) Vinyl acetate	9.09	43	45219	5.60	ug/L	97
18) 2-Butanone (MEK)	9.47	72	1224	4.43	ug/L #	38
19) cis-1,2-Dichloroethene	9.66	96	29437	5.59	ug/L	93
20) Bromochloromethane	9.87	128	11063	5.67	ug/L	98
21) Chloroform	9.93	83	49311	5.72	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.50	ug/L	98
24) 1,2-Dichloroethane	10.78	62	29254	5.73	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.44	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.37	ug/L	98
29) Benzene	11.44	78	106054	5.27	ug/L	99
30) Dibromomethane	12.17	93	12758	5.32	ug/L	96
31) 1,2-Dichloropropane	12.21	63	30926	5.49	ug/L	98
32) Trichloroethene	12.26	95	27719	5.47	ug/L	93
33) Bromodichloromethane	12.33	83	32710	5.51	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.30	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	39480	5.52	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	4.84	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.29	ug/L	99
40) Toluene	14.21	92	60380	5.37	ug/L	100
42) 1,3-Dichloropropane	14.27	76	31749	5.61	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031411.M Thu Mar 17 14:00:04 2011

70 of 280

M/3/11  
3/18/11  
✓

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.44	ug/L	# 92
44) Dibromochloromethane	14.64	129	17145	5.27	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.75	ug/L	# 97
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.20	ug/L	97
48) Chlorobenzene	16.12	112	60084	5.16	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.23	ug/L	100
50) m,p-Xylenes	16.64	106	39718	5.25	ug/L	100
51) Styrene	17.09	104	62548	5.37	ug/L	99
52) o-Xylene	17.20	106	38050	5.20	ug/L	99
55) Bromoform	16.81	173	9209	5.63	ug/L	92
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	4203	5.79	ug/L	86
58) Isopropylbenzene	17.69	105	91339	5.05	ug/L	98
59) Bromobenzene	18.05	156	21568	5.28	ug/L	97
60) n-Propylbenzene	18.30	91	134531	5.26	ug/L	97
61) 2-Chlorotoluene	18.45	91	75803	5.15	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.14	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.03	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.03	ug/L	100
66) sec-Butylbenzene	19.37	105	115485	5.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	42641	5.08	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.00	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.39	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.16	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.80	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	24323	4.82	ug/L	99
74) Naphthalene	22.63	128	32491	5.06	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.71	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	20581	4.91	ug/L	98

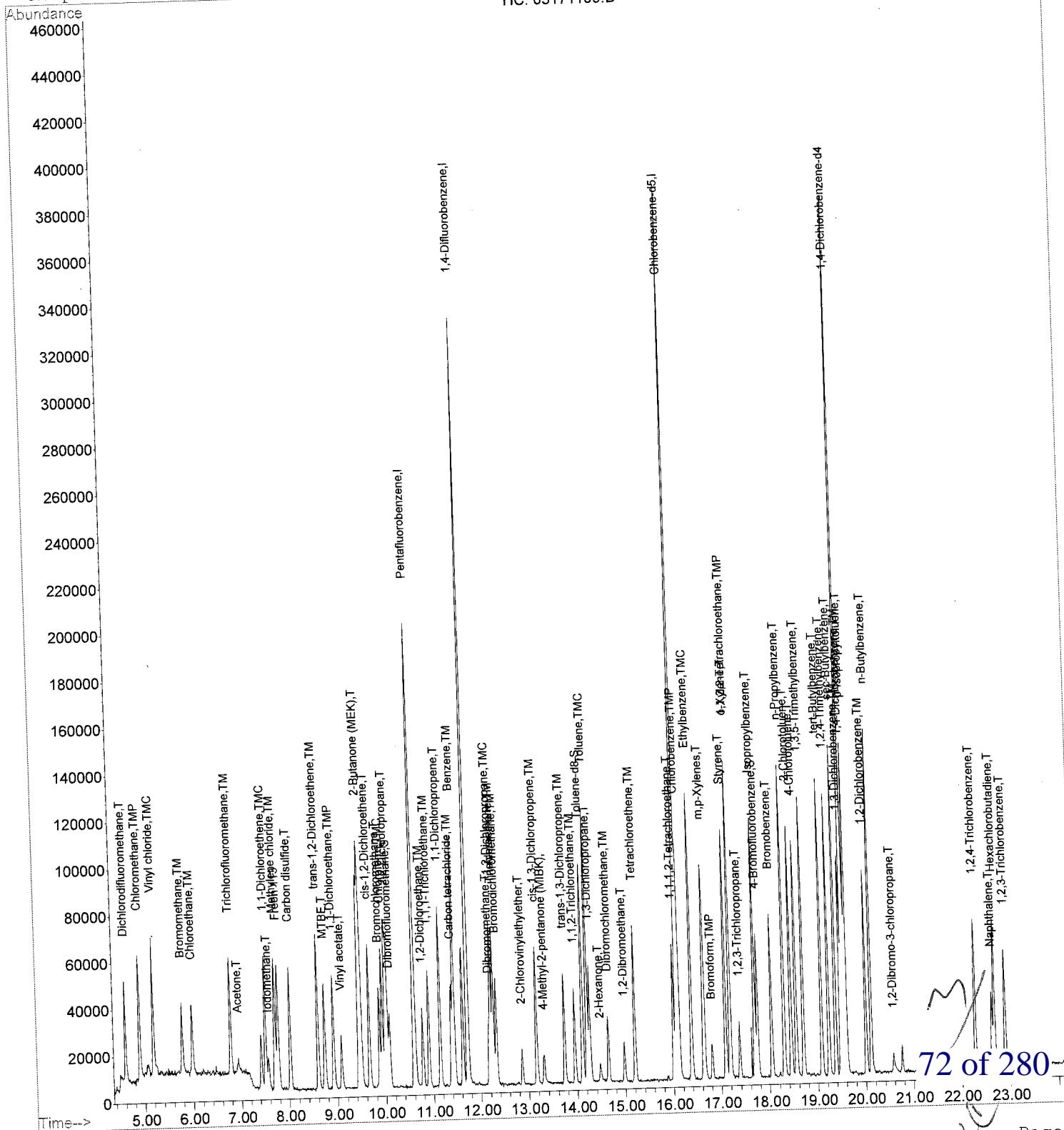
71 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171109.D



72 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	42710	10.76	ug/L	0.00
Spiked Amount 25.000			Recovery	=	43.04%	
39) Toluene-d8	14.12	98	143321	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.72%	
53) 4-Bromofluorobenzene	17.75	95	50923	10.16	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.64%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	79957	9.93	ug/L	100
3) Chloromethane	4.89	50	135497	11.91	ug/L	99
4) Vinyl chloride	5.19	62	111850	10.07	ug/L	100
5) Bromomethane	5.78	94	53427	10.86	ug/L	91
6) Chloroethane	5.98	64	63788	10.72	ug/L	98
7) Trichlorofluoromethane	6.78	101	85392	10.27	ug/L	99
8) Acetone	6.94	43	11502	8.08	ug/L	97
9) Iodomethane	7.57	142	36401	9.45	ug/L	95
10) 1,1-Dichloroethene	7.51	96	46909	10.89	ug/L	94
11) Methylene chloride	7.71	84	55460	9.98	ug/L	99
12) Freon 113	7.78	101	52409	9.70	ug/L	99
13) Carbon disulfide	8.03	76	162804	10.64	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.90	ug/L	94
15) MTBE	8.74	73	84759	9.71	ug/L	96
16) 1,1-Dichloroethane	8.92	63	108838	10.26	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.96	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	9.44	ug/L	88
19) cis-1,2-Dichloroethene	9.66	96	53573	9.99	ug/L	98
20) Bromochloromethane	9.88	128	20976	10.55	ug/L	100
21) Chloroform	9.93	83	95119	10.84	ug/L	100
22) 2,2-Dichloropropane	10.04	77	73939	10.10	ug/L	98
24) 1,2-Dichloroethane	10.77	62	53618	10.31	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	66517	10.14	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.21	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.31	ug/L	100
29) Benzene	11.44	78	201076	10.05	ug/L	100
30) Dibromomethane	12.17	93	24596	10.31	ug/L	96
31) 1,2-Dichloropropane	12.21	63	55294	9.87	ug/L	100
32) Trichloroethene	12.27	95	49861	9.89	ug/L	98
33) Bromodichloromethane	12.33	83	60334	10.22	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	9.32	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	73950	10.38	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.23	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.24	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	27640	10.13	ug/L	97
40) Toluene	14.21	92	114354	10.22	ug/L	100
42) 1,3-Dichloropropane	14.27	76	56624	10.10	ug/L	98

(#)= qualifier out of range (m)= manual integration

(0317110.D 031411.M Thu Mar 17 14:00:50 2011)

3/11/11  
73 of 280  
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## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.10	ug/L	# 96
44) Dibromochloromethane	14.64	129	32389	10.06	ug/L	100
45) 1,2-Dibromoethane	14.98	107	28536	10.44	ug/L	98
46) Tetrachloroethene	15.21	166	44478	10.14	ug/L	98
47) 1,1,2-Tetrachloroethane	16.01	131	35495	10.14	ug/L	99
48) Chlorobenzene	16.12	112	113625	9.85	ug/L	100
49) Ethylbenzene	16.38	91	215370	10.13	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.90	ug/L	98
51) Styrene	17.09	104	115227	9.99	ug/L	98
52) o-Xylene	17.20	106	71920	9.92	ug/L	97
55) Bromoform	16.81	173	16316	10.52	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 99
57) 1,2,3-Trichloropropane	17.39	110	7243	10.53	ug/L	96
58) Isopropylbenzene	17.69	105	176438	10.28	ug/L	100
59) Bromobenzene	18.05	156	40825	10.54	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.34	ug/L	98
61) 2-Chlorotoluene	18.45	91	143783	10.30	ug/L	100
62) 4-Chlorotoluene	18.55	91	141563	10.15	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.35	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.22	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.05	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.06	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.10	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.18	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	69024	10.25	ug/L	99
71) n-Butylbenzene	20.12	91	183374	10.00	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	11.01	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	41924	8.76	ug/L	100
74) Naphthalene	22.63	128	55616	9.13	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.49	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	34759	8.75	ug/L	99

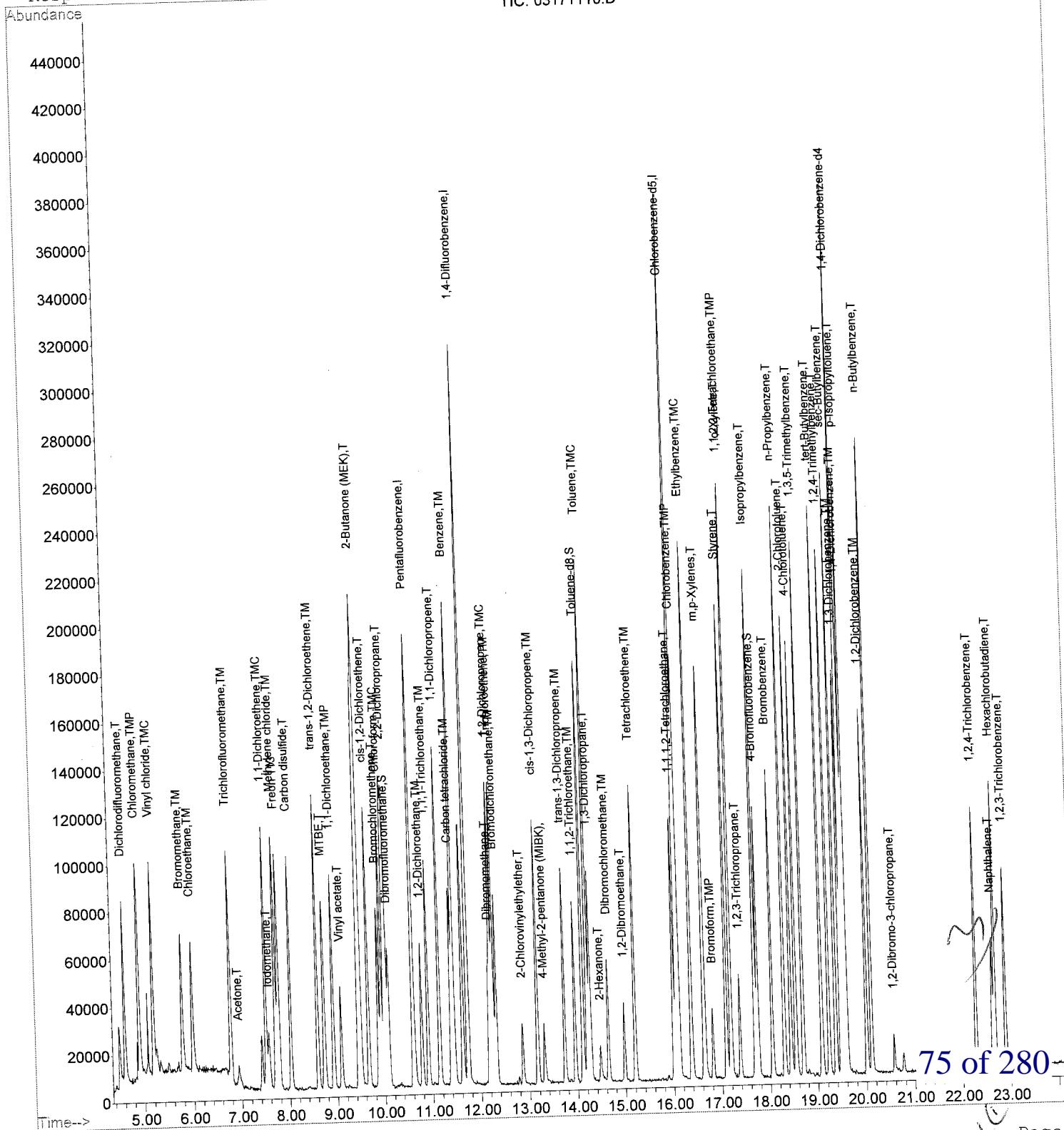
74 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171110.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	103380	26.41	ug/L	0.00
Spiked Amount 25.000			Recovery	= 105.64%		
39) Toluene-d8	14.12	98	359841	25.92	ug/L	0.00
Spiked Amount 25.000			Recovery	= 103.68%		
53) 4-Bromofluorobenzene	17.75	95	128707	25.94	ug/L	0.00
Spiked Amount 25.000			Recovery	= 103.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	200064	25.20	ug/L	98
3) Chloromethane	4.89	50	322628	28.77	ug/L	99
4) Vinyl chloride	5.18	62	283499	25.90	ug/L	100
5) Bromomethane	5.78	94	141242	29.13	ug/L	96
6) Chloroethane	5.98	64	150117	25.60	ug/L	98
7) Trichlorofluoromethane	6.78	101	214158	26.12	ug/L	99
8) Acetone	6.94	43	25928	23.73	ug/L	98
9) Iodomethane	7.57	142	98109	25.84	ug/L	97
10) 1,1-Dichloroethene	7.51	96	111502	26.67	ug/L	98
11) Methylene chloride	7.71	84	132209	24.14	ug/L	99
12) Freon 113	7.77	101	133636	25.10	ug/L	98
13) Carbon disulfide	8.03	76	401884	27.15	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.92	ug/L	98
15) MTBE	8.74	73	214946	24.98	ug/L	99
16) 1,1-Dichloroethane	8.92	63	264682	25.31	ug/L	99
17) Vinyl acetate	9.08	43	202265	24.98	ug/L	99
18) 2-Butanone (MEK)	9.47	72	6903	24.88	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	131490	24.87	ug/L	99
20) Bromochloromethane	9.87	128	47437	24.21	ug/L	94
21) Chloroform	9.93	83	218360	25.26	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	24.96	ug/L	98
24) 1,2-Dichloroethane	10.78	62	136474	26.62	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	162207	25.09	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.70	ug/L	99
28) Carbon tetrachloride	11.39	117	133369	25.74	ug/L	100
29) Benzene	11.44	78	490622	24.87	ug/L	99
30) Dibromomethane	12.17	93	58067	24.68	ug/L	98
31) 1,2-Dichloropropane	12.21	63	140014	25.35	ug/L	99
32) Trichloroethene	12.27	95	124690	25.08	ug/L	98
33) Bromodichloromethane	12.33	83	150764	25.89	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	21.41	ug/L	98
35) cis-1,3-Dichloropropene	13.16	75	183565	26.14	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	23.09	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.77	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	24.66	ug/L	98
40) Toluene	14.21	92	282149	25.56	ug/L	98
42) 1,3-Dichloropropane	14.27	76	140210	25.26	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031411.M Thu Mar 17 14:01:22 2011

3/3/11  
23/8/11  
76 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	23.20	ug/L	# 93
44) Dibromochloromethane	14.64	129	81864	25.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	70424	26.01	ug/L	99
46) Tetrachloroethene	15.21	166	109364	25.16	ug/L	99
47) 1,1,2-Tetrachloroethane	16.01	131	87769	25.31	ug/L	97
48) Chlorobenzene	16.12	112	284407	24.90	ug/L	99
49) Ethylbenzene	16.37	91	538674	25.57	ug/L	99
50) m,p-Xylenes	16.64	106	186494	25.11	ug/L	99
51) Styrene	17.09	104	295005	25.82	ug/L	99
52) o-Xylene	17.19	106	177920	24.79	ug/L	97
55) Bromoform	16.81	173	42372	26.71	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	24.99	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	18834	26.78	ug/L	95
58) Isopropylbenzene	17.69	105	445254	25.36	ug/L	100
59) Bromobenzene	18.05	156	105054	26.51	ug/L	98
60) n-Propylbenzene	18.30	91	632559	25.51	ug/L	99
61) 2-Chlorotoluene	18.44	91	364433	25.52	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.87	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.55	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.26	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.14	ug/L	99
66) sec-Butylbenzene	19.37	105	556785	25.52	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	205642	25.27	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	201942	24.80	ug/L	99
69) p-Isopropyltoluene	19.61	119	434002	25.61	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.97	ug/L	99
71) n-Butylbenzene	20.12	91	487367	26.00	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	26.23	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	122376	25.01	ug/L	99
74) Naphthalene	22.63	128	163821	26.30	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	28.14	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	101564	24.99	ug/L	100

77 of 280

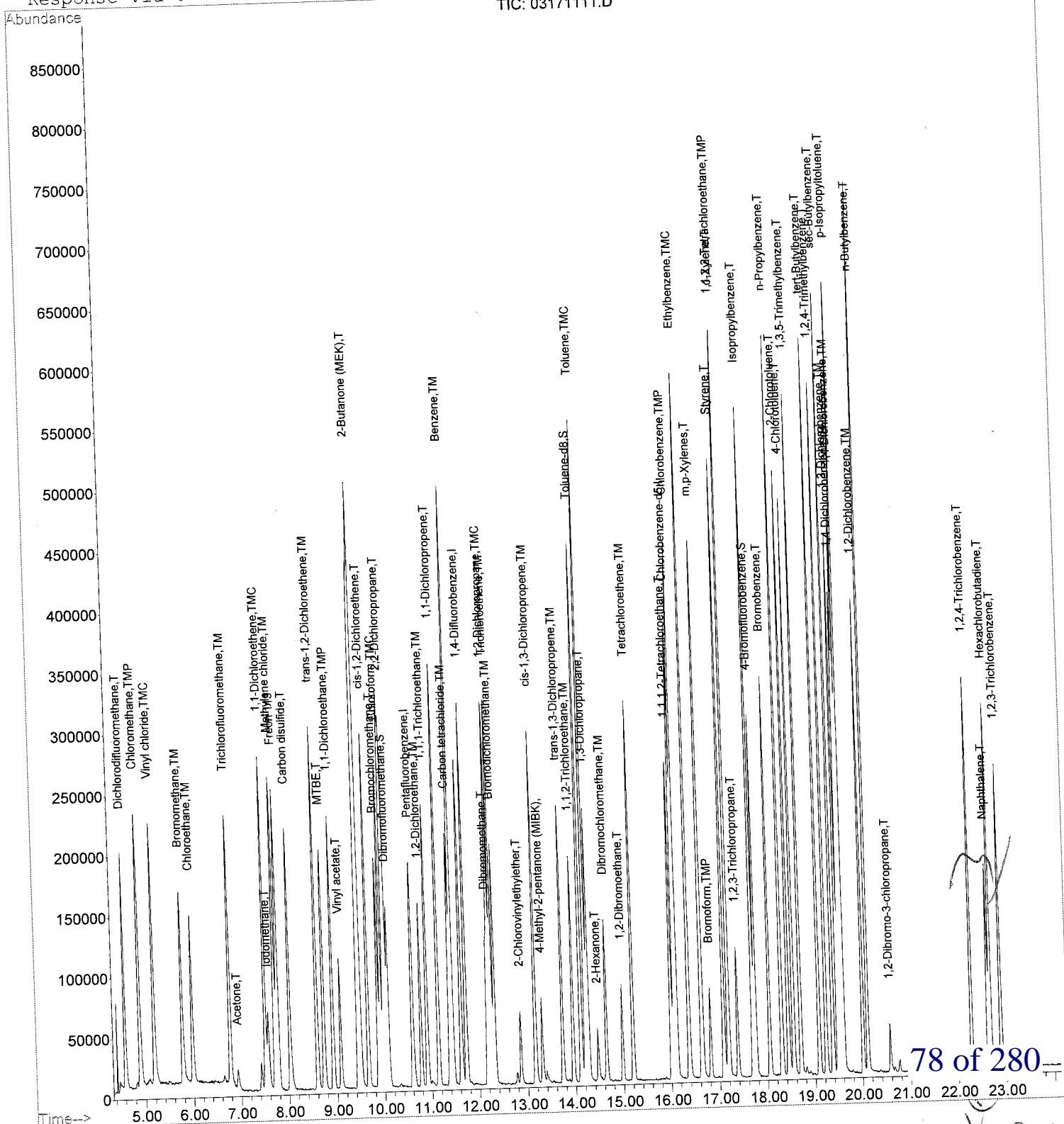
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
Acq On : 17 Mar 2011 11:46 am Operator: LC  
Sample : 25 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 14:00 2011

C:\URCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



78 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:01 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	202044	49.12	ug/L	0.00
Spiked Amount 25.000			Recovery = 196.48%			
39) Toluene-d8	14.11	98	726789	50.32	ug/L	0.00
Spiked Amount 25.000			Recovery = 201.28%			
53) 4-Bromofluorobenzene	17.76	95	259969	50.54	ug/L	0.00
Spiked Amount 25.000			Recovery = 202.16%			
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	391099	46.88	ug/L	100
3) Chloromethane	4.90	50	687656	58.35	ug/L	100
4) Vinyl chloride	5.18	62	596978	51.89	ug/L	98
5) Bromomethane	5.78	94	296252	58.13	ug/L	98
6) Chloroethane	5.99	64	300876	48.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	340516	39.53	ug/L	98
8) Acetone	6.93	43	44278	Below Cal		99
9) Iodomethane	7.58	142	195341	48.96	ug/L	99
10) 1,1-Dichloroethene	7.52	96	220268	50.38	ug/L	97
11) Methylene chloride	7.71	84	264019	45.88	ug/L	99
12) Freon 113	7.78	101	262900	47.00	ug/L	99
13) Carbon disulfide	8.03	76	807912	52.24	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.50	ug/L	98
15) MTBE	8.73	73	407385	45.06	ug/L	98
16) 1,1-Dichloroethane	8.92	63	517515	47.09	ug/L	100
17) Vinyl acetate	9.08	43	400997	47.13	ug/L	100
18) 2-Butanone (MEK)	9.47	72	13656	46.83	ug/L	100
19) cis-1,2-Dichloroethene	9.66	96	257331	46.32	ug/L	99
20) Bromochloromethane	9.87	128	96376	46.81	ug/L	98
21) Chloroform	9.93	83	424654	46.74	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.12	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	48.57	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	323769	47.65	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.22	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	49.71	ug/L	100
29) Benzene	11.44	78	1008066	49.11	ug/L	99
30) Dibromomethane	12.17	93	116662	47.65	ug/L	97
31) 1,2-Dichloropropane	12.21	63	281688	49.02	ug/L	99
32) Trichloroethene	12.26	95	255144	49.32	ug/L	98
33) Bromodichloromethane	12.33	83	300337	49.57	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	37.02	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	364674	49.91	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	44.54	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.71	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	47.11	ug/L	97
40) Toluene	14.22	92	583744	50.83	ug/L	100
42) 1,3-Dichloropropane	14.27	76	277506	48.23	ug/L	99

(#= qualifier out of range (m) = manual integration

(0317112.D 031411.M Thu Mar 17 14:02:05 2011)

79 of 280

3/8/11

V

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	48.63	ug/L	# 100
44) Dibromochloromethane	14.65	129	168655	51.01	ug/L	99
45) 1,2-Dibromoethane	14.98	107	142279	50.69	ug/L	99
46) Tetrachloroethene	15.20	166	223148	49.54	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	50.19	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.72	ug/L	99
49) Ethylbenzene	16.38	91	1095906	50.20	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.92	ug/L	97
51) Styrene	17.10	104	602783	50.90	ug/L	100
52) o-Xylene	17.20	106	366193	49.22	ug/L	100
55) Bromoform	16.82	173	87491	53.39	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.00	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	51.09	ug/L	99
58) Isopropylbenzene	17.70	105	904235	49.87	ug/L	99
59) Bromobenzene	18.05	156	210716	51.49	ug/L	98
60) n-Propylbenzene	18.30	91	1279523	49.95	ug/L	99
61) 2-Chlorotoluene	18.45	91	736550	49.95	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.28	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.43	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	49.92	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	772492	49.11	ug/L	98
66) sec-Butylbenzene	19.38	105	1121222	49.75	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	414698	49.34	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	411367	48.92	ug/L	99
69) p-Isopropyltoluene	19.61	119	866615	49.52	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	50.59	ug/L	100
71) n-Butylbenzene	20.11	91	964633	49.82	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	50.62	ug/L	96
73) 1,2,4-Trichlorobenzene	22.28	180	240360	47.56	ug/L	100
74) Naphthalene	22.63	128	314469	48.88	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	53.99	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	192513	45.85	ug/L	100

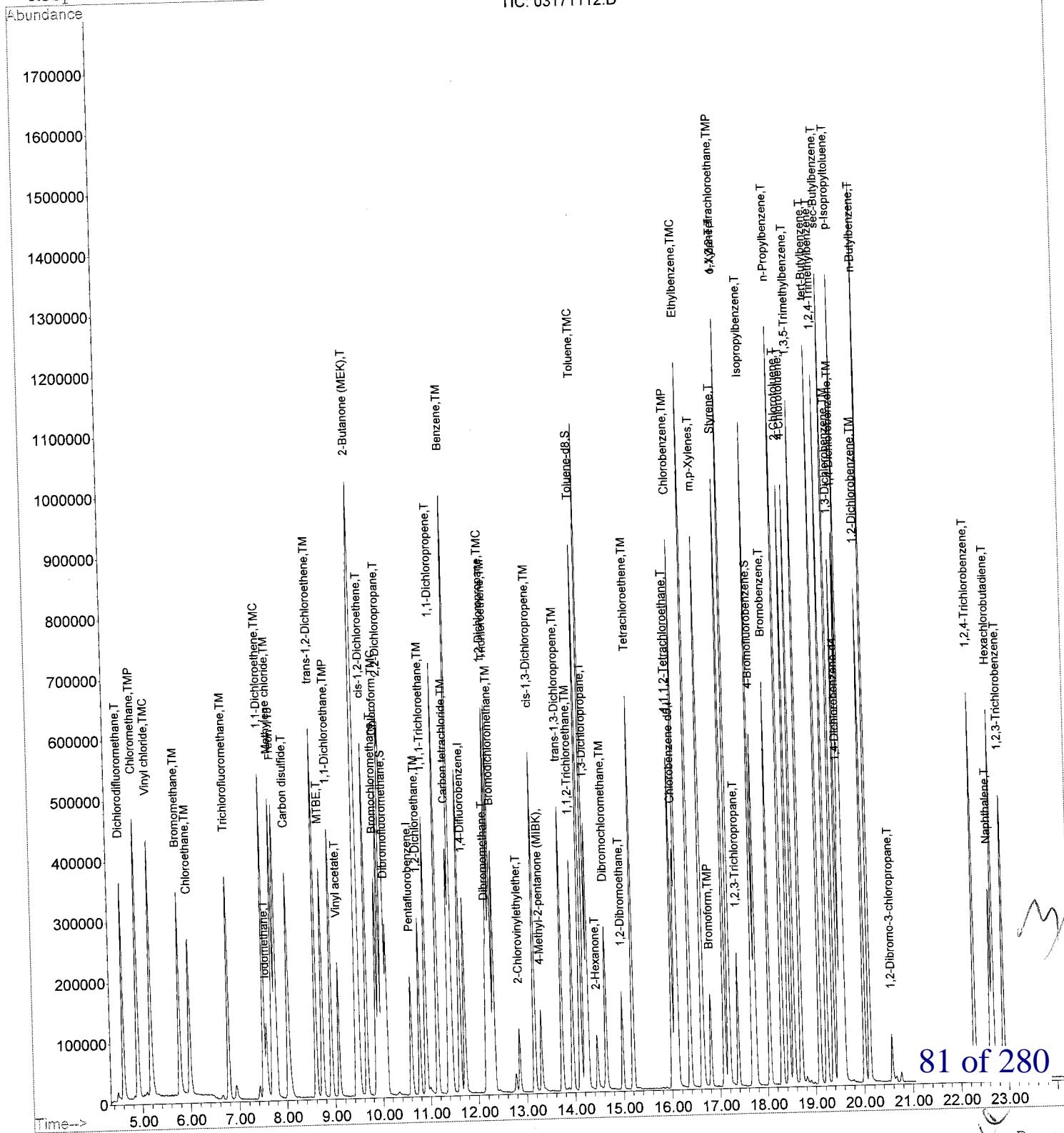
80 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011 Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171112.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011

Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	425047	101.93	ug/L	0.00
Spiked Amount 25.000			Recovery =	407.72%		
39) Toluene-d8	14.12	98	1505447	102.12	ug/L	0.00
Spiked Amount 25.000			Recovery =	408.48%		
53) 4-Bromofluorobenzene	17.75	95	536695	104.44	ug/L	0.00
Spiked Amount 25.000			Recovery =	417.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	779223	92.13	ug/L	100
3) Chloromethane	4.90	50	1431368	119.80	ug/L	100
4) Vinyl chloride	5.18	62	1228117	105.30	ug/L	100
5) Bromomethane	5.78	94	641424	124.14	ug/L	98
6) Chloroethane	5.98	64	584071	93.50	ug/L	98
7) Trichlorofluoromethane	6.78	101	698452	79.96	ug/L	99
8) Acetone	6.94	43	84316	Below Cal		99
9) Iodomethane	7.58	142	393011	97.15	ug/L	96
10) 1,1-Dichloroethene	7.52	96	450680	101.96	ug/L	97
11) Methylene chloride	7.71	84	530536	90.93	ug/L	100
12) Freon 113	7.78	101	537890	94.84	ug/L	100
13) Carbon disulfide	8.04	76	1652598	105.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.91	ug/L	95
15) MTBE	8.74	73	859812	93.80	ug/L	100
16) 1,1-Dichloroethane	8.93	63	1054794	94.66	ug/L	100
17) Vinyl acetate	9.08	43	827230	95.91	ug/L	100
18) 2-Butanone (MEK)	9.47	72	27904	94.38	ug/L	95
19) cis-1,2-Dichloroethene	9.66	96	527963	93.73	ug/L	99
20) Bromochloromethane	9.87	128	191014	91.51	ug/L	99
21) Chloroform	9.93	83	877382	95.25	ug/L	99
22) 2,2-Dichloropropane	10.04	77	739530	96.19	ug/L	100
24) 1,2-Dichloroethane	10.78	62	540824	99.03	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	659685	95.75	ug/L	98
27) 1,1-Dichloropropene	11.15	75	764611	96.61	ug/L	99
28) Carbon tetrachloride	11.39	117	547122	99.42	ug/L	100
29) Benzene	11.44	78	2051183	97.90	ug/L	100
30) Dibromomethane	12.17	93	236182	94.51	ug/L	98
31) 1,2-Dichloropropane	12.21	63	573859	97.85	ug/L	99
32) Trichloroethene	12.27	95	518186	98.14	ug/L	98
33) Bromodichloromethane	12.33	83	619726	100.21	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	99299	69.01	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	755768	101.34	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	94.02	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	581943	99.90	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	272981	95.51	ug/L	97
40) Toluene	14.22	92	1181672	100.81	ug/L	100
42) 1,3-Dichloropropane	14.27	76	562918	97.92	ug/L	100

(#= qualifier out of range (m) = manual integration

(03171113.D 031411.M Thu Mar 17 14:02:38 2011)

M 1/11/11  
82 of 280

V

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	102.53	ug/L	# 97
44) Dibromochloromethane	14.65	129	341882	103.49	ug/L	99
45) 1,2-Dibromoethane	14.98	107	294156	104.89	ug/L	100
46) Tetrachloroethene	15.20	166	455622	101.24	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	103.59	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.63	ug/L	99
49) Ethylbenzene	16.38	91	2245318	102.94	ug/L	99
50) m,p-Xylenes	16.64	106	773283	100.56	ug/L	99
51) Styrene	17.10	104	1244691	105.20	ug/L	100
52) o-Xylene	17.20	106	750628	100.99	ug/L	100
55) Bromoform	16.82	173	182147	107.85	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.48	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	75618	101.00	ug/L	99
58) Isopropylbenzene	17.70	105	1844526	98.70	ug/L	100
59) Bromobenzene	18.05	156	429425	101.80	ug/L	99
60) n-Propylbenzene	18.30	91	2615929	99.09	ug/L	100
61) 2-Chlorotoluene	18.45	91	1500663	98.74	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.30	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	99.53	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	98.40	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	97.37	ug/L	98
66) sec-Butylbenzene	19.39	105	2280043	98.16	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	847018	97.78	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.72	ug/L	99
69) p-Isopropyltoluene	19.61	119	1785874	99.02	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	99.76	ug/L	99
71) n-Butylbenzene	20.12	91	1981760	99.31	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	99.91	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	510699	98.06	ug/L	100
74) Naphthalene	22.63	128	678287	102.29	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	110.66	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	412634	95.36	ug/L	99

83 of 280

Quantitation Report

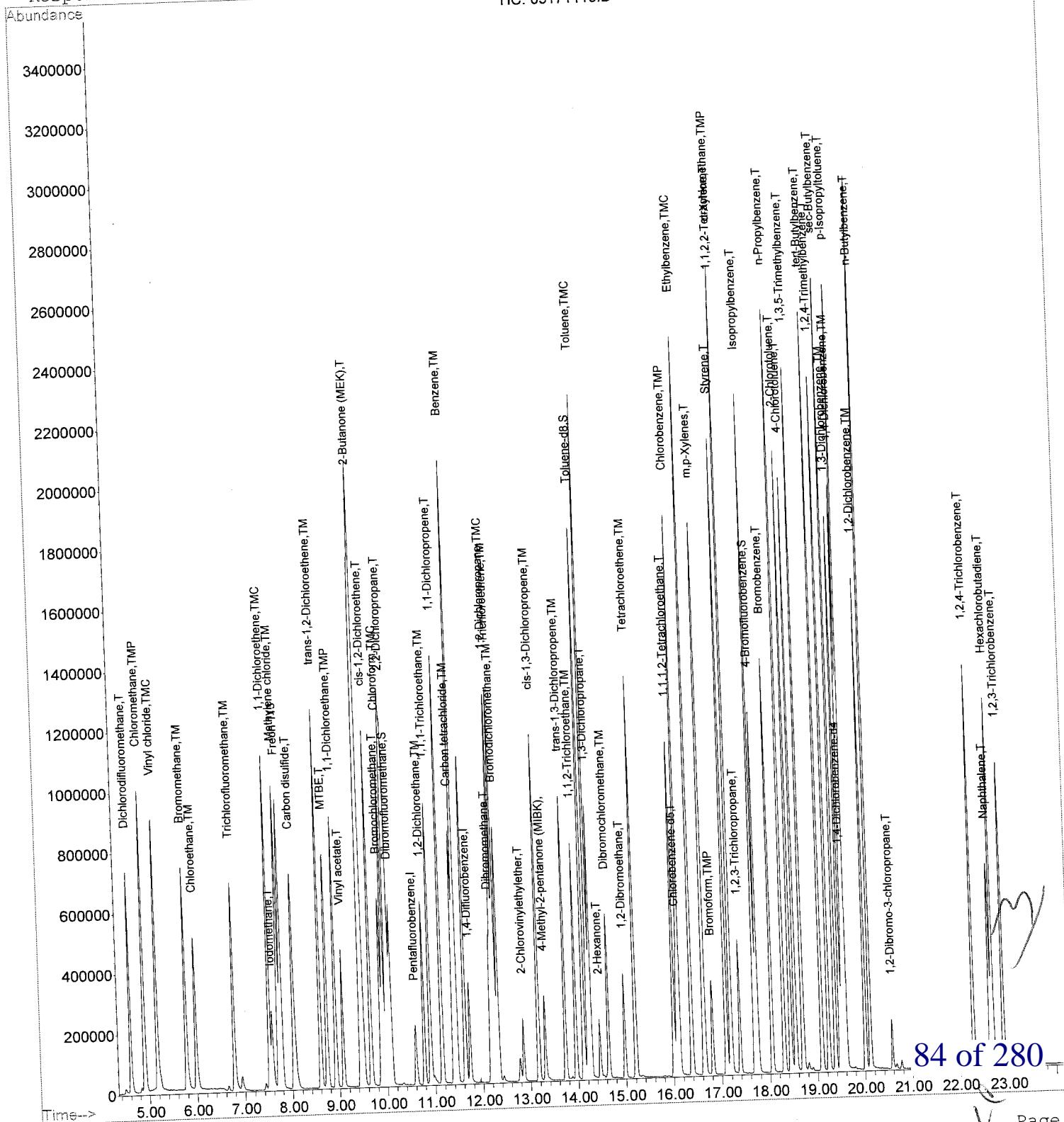
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D  
 Acq On : 17 Mar 2011 12:48 pm  
 Sample : 100 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011

Vial: 10  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171113.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	839626	197.42	ug/L	0.00
Spiked Amount 25.000				Recovery =	789.68%	
39) Toluene-d8	14.12	98	3013932	203.78	ug/L	0.00
Spiked Amount 25.000				Recovery =	815.12%	
53) 4-Bromofluorobenzene	17.76	95	1038923	199.04	ug/L	0.00
Spiked Amount 25.000				Recovery =	796.16%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	1487523	172.44	ug/L	99
3) Chloromethane	4.90	50	2913054	239.06	ug/L	100
4) Vinyl chloride	5.16	62	2428967	204.20	ug/L	99
5) Bromomethane	5.78	94	1343422	254.94	ug/L	99
6) Chloroethane	5.98	64	1199344	188.24	ug/L	98
7) Trichlorofluoromethane	6.79	101	1701514	191.01	ug/L	99
8) Acetone	6.94	43	201529	Below Cal		100
9) Iodomethane	7.58	142	794173	192.50	ug/L	99
10) 1,1-Dichloroethene	7.52	96	920511	204.48	ug/L	96
11) Methylene chloride	7.71	84	1063508	178.73	ug/L	98
12) Freon 113	7.78	101	1079115	186.56	ug/L	99
13) Carbon disulfide	8.03	76	3312605	208.15	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	187.33	ug/L	96
15) MTBE	8.74	73	1719756	183.97	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	185.27	ug/L	99
17) Vinyl acetate	9.08	43	1660788	188.79	ug/L	100
18) 2-Butanone (MEK)	9.47	72	57153	189.53	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	1073476	186.86	ug/L	98
20) Bromochloromethane	9.88	128	361702	169.90	ug/L	98
21) Chloroform	9.93	83	1746080	185.86	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	184.71	ug/L	99
24) 1,2-Dichloroethane	10.78	62	1056987	189.77	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	1325051	188.58	ug/L	99
27) 1,1-Dichloropropene	11.15	75	1539559	193.90	ug/L	100
28) Carbon tetrachloride	11.39	117	1092097	197.81	ug/L	100
29) Benzene	11.45	78	4061777	193.23	ug/L	100
30) Dibromomethane	12.17	93	461244	183.97	ug/L	99
31) 1,2-Dichloropropane	12.21	63	1126863	191.52	ug/L	99
32) Trichloroethene	12.27	95	1022222	192.97	ug/L	100
33) Bromodichloromethane	12.33	83	1217593	196.24	ug/L	98
34) 2-Chlorovinylethylether	12.86	63	174106	120.61	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	199.81	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	183.63	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.49	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	536251	187.01	ug/L	98
40) Toluene	14.22	92	2368495	201.40	ug/L	100
42) 1,3-Dichloropropane	14.28	76	1107954	189.75	ug/L	100

(#)= qualifier out of range (m)= manual integration

(03171114.D 031411.M Thu Mar 17 14:03:08 2011)

3/8/11  
85 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Mon Mar 14 17:35:22 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

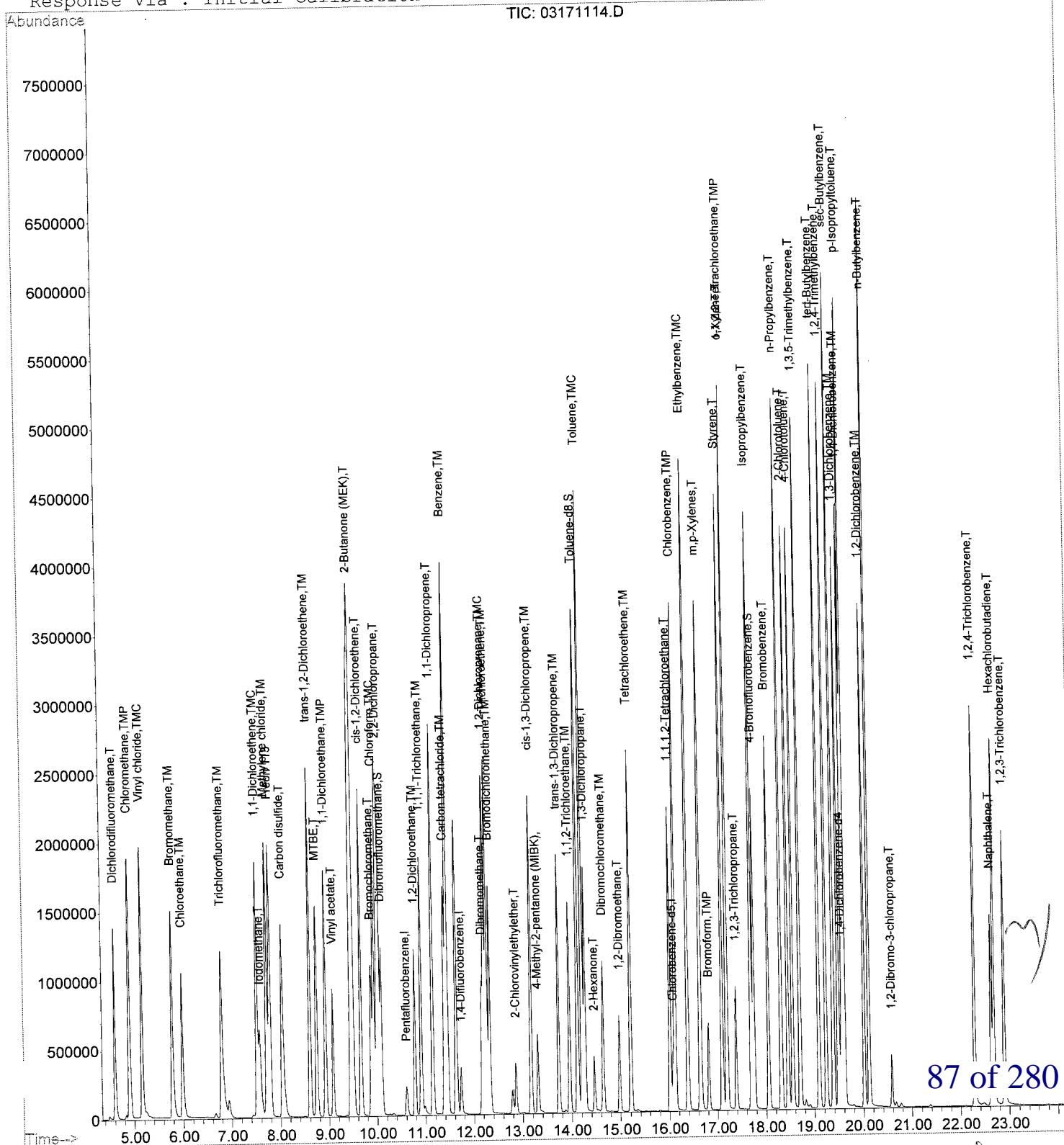
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	196.91	ug/L #	97
44) Dibromochloromethane	14.65	129	686033	204.44	ug/L	100
45) 1,2-Dibromoethane	14.99	107	575405	202.00	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.99	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	207.25	ug/L	99
48) Chlorobenzene	16.13	112	2393108	199.20	ug/L	97
49) Ethylbenzene	16.38	91	4465000	201.54	ug/L	98
50) m,p-Xylenes	16.64	106	1550944	198.56	ug/L	99
51) Styrene	17.10	104	2561762	213.16	ug/L	99
52) o-Xylene	17.20	106	1517247	200.97	ug/L	100
55) Bromoform	16.82	173	364089	189.30	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.64	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	155202	182.01	ug/L	98
58) Isopropylbenzene	17.70	105	3655213	171.73	ug/L	99
59) Bromobenzene	18.05	156	865850	180.23	ug/L	97
60) n-Propylbenzene	18.31	91	5305462	176.46	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	180.76	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.25	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	192.28	ug/L	99
64) tert-Butylbenzene	19.09	119	2997423	192.66	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	186.05	ug/L	97
66) sec-Butylbenzene	19.39	105	5038432	190.46	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	1885851	191.15	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.79	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	195.79	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	197.15	ug/L	100
71) n-Butylbenzene	20.12	91	4374192	192.47	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	195.71	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	186.75	ug/L	98
74) Naphthalene	22.63	128	1413680	187.19	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	212.10	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	830638	168.55	ug/L	100

86 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
Acq On : 17 Mar 2011 1:19 pm Operator: LC  
Sample : 200 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 14:02 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## NEW8260-CCV

**Data File Name** 03171115.D  
**Data File Path** C:\HPCHEM\1\GCMS7\DATA\031711\  
**Operator** LC  
**Date Acquired** 3/17/2011 1:50  
**Acq. Method File** 8260B  
**Sample Name** SS  
**Instrument Name** GCMS7

<b>Internal Standard</b>	<b>Target Response</b>	<b>CCV Response</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>	
Pentafluorobenzene	204788	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	354603	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	296499	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	131216	112264	56132	224528	TRUE	
<b>Name</b>	<b>Amount</b>	<b>Spike Amount</b>	<b>% REC</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>
Dichlorodifluoromethane	21.34	25.00	85.36	60	150	TRUE
Chloromethane	20.19	25.00	80.77	60	140	TRUE
Vinyl chloride	21.98	25.00	87.90	80	120	TRUE CCC
Bromomethane	21.20	25.00	84.79	70	140	TRUE
Chloroethane	21.91	25.00	87.64	70	130	TRUE
Trichlorofluoromethane	25.44	25.00	101.76	70	150	TRUE
Acetone	32.58	25.00	130.32	10	150	TRUE
Iodomethane	30.91	25.00	123.66	70	140	TRUE CCC
1,1-Dichloroethene	24.98	25.00	99.91	80	120	TRUE
Methylene chloride	24.09	25.00	96.37	70	120	TRUE
Freon 113	24.00	25.00	95.98	60	140	TRUE
Carbon disulfide	25.08	25.00	100.31	70	130	TRUE
trans-1,2-Dichloroethene	21.70	25.00	86.79	80	120	TRUE
MTBE	20.73	25.00	82.90	70	130	TRUE
1,1-Dichloroethane	20.79	25.00	83.16	70	125	TRUE
Vinyl acetate	26.90	25.00	107.60	40	150	TRUE
2-Butanone (MEK)	24.92	25.00	99.67	40	150	TRUE
cis-1,2-Dichloroethene	20.20	25.00	80.78	80	120	TRUE
Bromochloromethane	21.09	25.00	84.35	80	120	TRUE CCC
Chloroform	20.32	25.00	81.28	80	120	TRUE
2,2-Dichloropropane	21.15	25.00	84.60	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>21.57</b>	<b>25.00</b>	<b>86.27</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	20.57	25.00	82.26	75	130	TRUE
1,1,1-Trichloroethane	21.81	25.00	87.23	80	120	TRUE
1,1-Dichloropropene	22.05	25.00	88.19	80	120	TRUE
Carbon tetrachloride	22.49	25.00	89.96	80	130	TRUE
Benzene	21.24	25.00	84.94	80	120	TRUE
Dibromomethane	22.05	25.00	88.19	80	120	TRUE CCC
1,2-Dichloropropane	21.44	25.00	85.74	80	120	TRUE
Trichloroethene	21.49	25.00	85.98	80	120	TRUE
Bromodichloromethane	21.49	25.00	85.95	80	120	TRUE
2-Chlorovinylethylether	33.03	25.00	132.10	70	135	TRUE
cis-1,3-Dichloropropene	21.67	25.00	86.67	80	120	TRUE
4-Methyl-2-pentanone (MIB)	23.62	25.00	94.48	60	130	TRUE
trans-1,3-Dichloropropene	22.74	25.00	90.94	80	125	TRUE

88 of 280

1,1,2-Trichloroethane	22.20	25.00	88.81	80	120	TRUE
<b>Toluene-d8</b>	<b>21.91</b>	<b>25.00</b>	<b>87.66</b>	<b>80</b>	<b>120</b>	TRUE CCC
Toluene	21.78	25.00	87.14	80	120	TRUE
1,3-Dichloropropane	21.05	25.00	84.20	80	120	TRUE
2-Hexanone	25.08	25.00	100.33	20	150	TRUE
Dibromochloromethane	21.71	25.00	86.84	80	120	TRUE
1,2-Dibromoethane	22.31	25.00	89.25	80	120	TRUE
Tetrachloroethene	22.09	25.00	88.37	70	130	TRUE
1,1,1,2-Tetrachloroethane	21.46	25.00	85.82	80	120	TRUE
Chlorobenzene	21.76	25.00	87.05	80	120	TRUE
Ethylbenzene	21.51	25.00	86.06	80	120	TRUE CCC
m,p-Xylenes	21.31	25.00	85.25	60	140	TRUE
Styrene	23.00	25.00	92.00	80	120	TRUE
o-Xylene	20.70	25.00	82.81	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>20.94</b>	<b>25.00</b>	<b>83.76</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	24.45	25.00	97.79	80	120	TRUE
1,1,2,2-Tetrachloroethane	23.28	25.00	93.12	80	120	TRUE
1,2,3-Trichloropropane	23.38	25.00	93.50	70	130	TRUE
Isopropylbenzene	25.73	25.00	102.90	80	130	TRUE
Bromobenzene	24.00	25.00	96.00	80	120	TRUE
n-Propylbenzene	24.01	25.00	96.04	75	130	TRUE
2-Chlorotoluene	22.31	25.00	89.23	80	120	TRUE
4-Chlorotoluene	23.19	25.00	92.75	80	120	TRUE
1,3,5-Trimethylbenzene	23.39	25.00	93.56	80	130	TRUE
tert-Butylbenzene	23.30	25.00	93.19	80	120	TRUE
1,2,4-Trimethylbenzene	23.52	25.00	94.06	80	120	TRUE
sec-Butylbenzene	22.94	25.00	91.76	80	125	TRUE
1,3-Dichlorobenzene	22.83	25.00	91.30	80	120	TRUE
1,4-Dichlorobenzene	22.81	25.00	91.26	80	120	TRUE
p-Isopropyltoluene	23.58	25.00	94.31	80	130	TRUE
1,2-Dichlorobenzene	22.83	25.00	91.31	80	120	TRUE
n-Butylbenzene	23.80	25.00	95.22	80	130	TRUE
1,2-Dibromo-3-chloropropane	24.52	25.00	98.10	50	150	TRUE
1,2,4-Trichlorobenzene	25.88	25.00	103.53	50	150	TRUE
Naphthalene	30.38	25.00	121.52	40	150	TRUE
Hexachlorobutadiene	24.16	25.00	96.62	40	150	TRUE
1,2,3-Trichlorobenzene	25.60	25.00	102.42	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	204788	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	354603	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	296499	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131216	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.10	113	111142	21.57	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.28%		
39) Toluene-d8	14.12	98	391936	21.91	ug/L	0.00
Spiked Amount 25.000			Recovery =	87.64%		
53) 4-Bromofluorobenzene	17.75	95	136070	20.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	83.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.61	85	206452	21.34	ug/L	99
3) Chloromethane	4.90	50	322987	20.19	ug/L	98
4) Vinyl chloride	5.19	62	312968	21.98	ug/L	100
5) Bromomethane	5.78	94	156914	21.20	ug/L	98
6) Chloroethane	5.99	64	165417	21.91	ug/L	99
7) Trichlorofluoromethane	6.79	101	251907	25.44	ug/L	99
8) Acetone	6.94	43	38773	32.58	ug/L	98
9) Iodomethane	7.58	142	141683	30.91	ug/L	98
10) 1,1-Dichloroethene	7.52	96	144273	24.98	ug/L	98
11) Methylene chloride	7.72	84	163712	24.09	ug/L	99
12) Freon 113	7.78	101	164091	24.00	ug/L	99
13) Carbon disulfide	8.04	76	515335	25.08	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	138660	21.70	ug/L	94
15) MTBE	8.75	73	226347	20.73	ug/L	99
16) 1,1-Dichloroethane	8.92	63	277166	20.79	ug/L	99
17) Vinyl acetate	9.08	43	278544	26.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7971	24.92	ug/L	55
19) cis-1,2-Dichloroethene	9.67	96	133655	20.20	ug/L	99
20) Bromochloromethane	9.88	128	51073	21.09	ug/L	97
21) Chloroform	9.94	83	223530	20.32	ug/L	99
22) 2,2-Dichloropropane	10.04	77	188645	21.15	ug/L	97
24) 1,2-Dichloroethane	10.78	62	138066	20.57	ug/L	100
25) 1,1,1-Trichloroethane	10.92	97	172274	21.81	ug/L	97
27) 1,1-Dichloropropene	11.15	75	200126	22.05	ug/L	99
28) Carbon tetrachloride	11.39	117	140957	22.49	ug/L	99
29) Benzene	11.44	78	515367	21.24	ug/L	100
30) Dibromomethane	12.18	93	63306	22.05	ug/L	98
31) 1,2-Dichloropropane	12.22	63	145297	21.44	ug/L	100
32) Trichloroethene	12.27	95	130435	21.49	ug/L	100
33) Bromodichloromethane	12.34	83	153079	21.49	ug/L	99
34) 2-Chlorovinylideneether	12.86	63	40803	33.03	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	187370	21.67	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	83668	23.62	ug/L	99
37) trans-1,3-Dichloropropene	13.74	75	151736	22.74	ug/L	100
38) 1,1,2-Trichloroethane	13.96	83	71241	22.20	ug/L	98
40) Toluene	14.22	92	300558	21.78	ug/L	97
42) 1,3-Dichloropropene	14.27	76	141234	21.05	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171115.D 031711.M Thu Mar 17 14:48:24 2011

90 of 280

VQ

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	56108	25.08	ug/L	# 94
44) Dibromochloromethane	14.65	129	87587	21.71	ug/L	95
45) 1,2-Dibromoethane	14.99	107	75157	22.31	ug/L	99
46) Tetrachloroethene	15.21	166	117481	22.09	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	94210	21.46	ug/L	97
48) Chlorobenzene	16.12	112	303242	21.76	ug/L	99
49) Ethylbenzene	16.38	91	564816	21.51	ug/L	100
50) m,p-Xylenes	16.65	106	195974	21.31	ug/L	98
51) Styrene	17.10	104	320734	23.00	ug/L	98
52) o-Xylene	17.19	106	185035	20.70	ug/L	99
55) Bromoform	16.81	173	46447	24.45	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.19	83	89438	23.28	ug/L	100
57) 1,2,3-Trichloropropane	17.39	110	19539	23.38	ug/L	94
58) Isopropylbenzene	17.70	105	516912	25.73	ug/L	100
59) Bromobenzene	18.06	156	111249	24.00	ug/L	99
60) n-Propylbenzene	18.31	91	688724	24.01	ug/L	100
61) 2-Chlorotoluene	18.45	91	374880	22.31	ug/L	100
62) 4-Chlorotoluene	18.55	91	386272	23.19	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	406096	23.39	ug/L	100
64) tert-Butylbenzene	19.10	119	344368	23.30	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	410391	23.52	ug/L	99
66) sec-Butylbenzene	19.38	105	581187	22.94	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	215599	22.83	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	216972	22.81	ug/L	99
69) p-Isopropyltoluene	19.61	119	456572	23.58	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	187538	22.83	ug/L	99
71) n-Butylbenzene	20.12	91	513084	23.80	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	12556	24.52	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	137336	25.88	ug/L	99
74) Naphthalene	22.63	128	213772	30.38	ug/L	100
75) Hexachlorobutadiene	22.69	225	81857	24.16	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	110762	25.60	ug/L	99

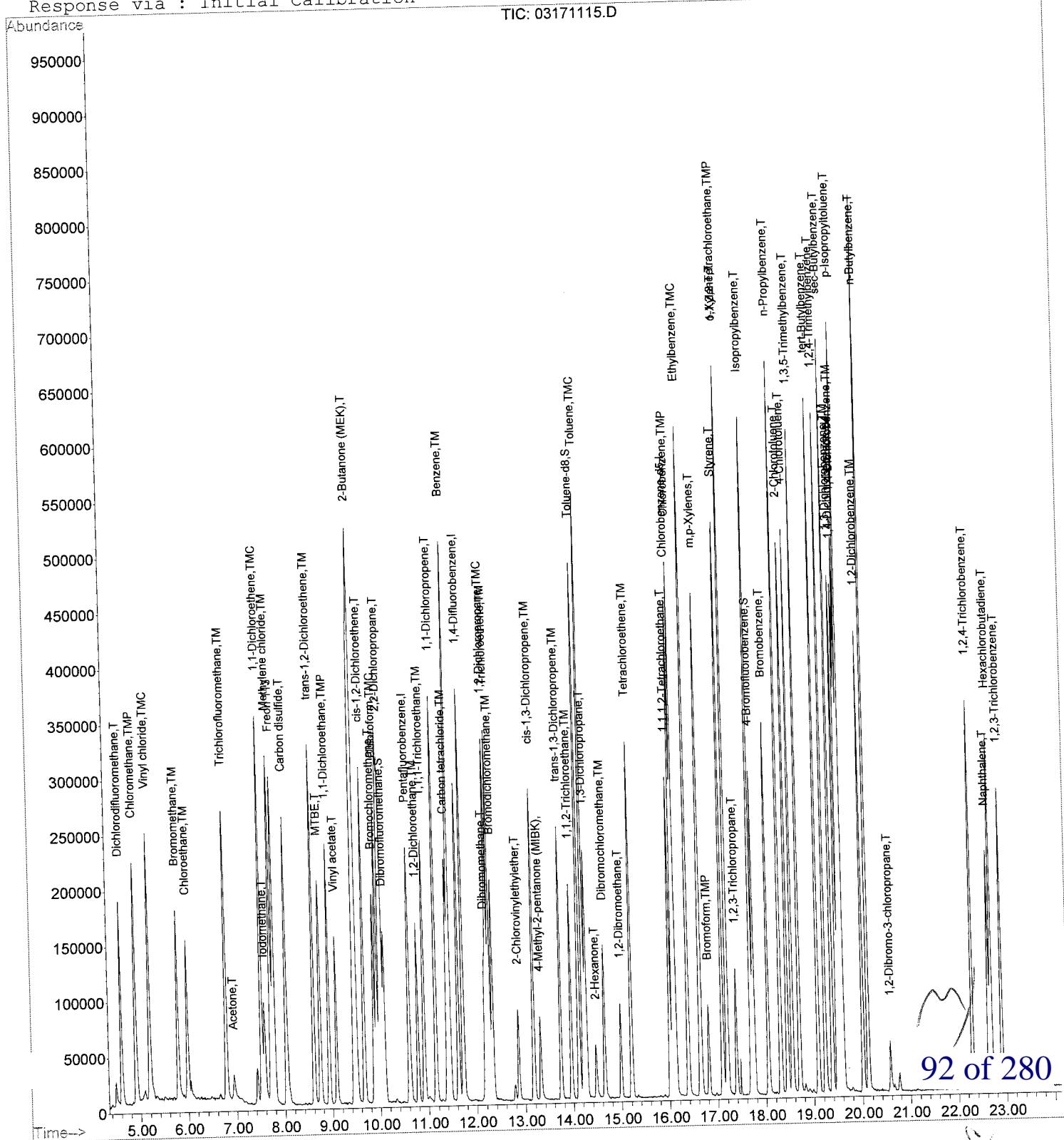
91 of 280

Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
Acq On : 17 Mar 2011 1:50 pm Operator: LC  
Sample : SS Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 17 14:48 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



# 8260AZ - Vapor Analysis 1 PPMV Tertiary Standard

3/17/2011

\* Compound not in the standard mix

ppmv	Mol Wt.	ug/L
1	260.76	10.80

Conversion Calculation: ug/L=ppmv (MW\*P)/(R\*T)

R=Gas Constant(0.08206 l\*atm/(mol\*K)) MW=Molecular Weight

T=Temp in Degree K (21+273.15) P=Pressure in atm

Assume Temp in C of 21 (70 degrees F)

Compound	Molecular Weight	Expected Value (ug/L)	Actual Value (ug/L)	% Recovery
Dichlorodifluoromethane	120.91	5.01	6.05	121
Chloromethane	50.49	2.09	2.13	102
Vinyl Chloride	62.5	2.59	2.49	96
Bromomethane	94.94	3.93	1.91	49
Chloroethane	64.52	2.67	2.56	96
Trichlorofluoromethane	137.37	5.69	5.99	105
Acetone *				
Iodomethane *				
1,1-Dichloroethene	96.94	4.02	3.55	88
Methylene Chloride	84.93	3.52	3.35	95
Carbon Disulfide *				
trans-1,2-DCE *				
MTBE *				
1,1-Dichloroethane	98.96	4.10	3.37	82
Vinyl Acetate *				
2-Butanone *				
cis-1,2-DCE	96.94	4.02	3.41	85
Bromochloromethane *				
Chloroform	119.38	4.95	3.92	79
2,2-Dichloropropane *				
1,2-DCA	98.96	4.10	3.33	81
1,1,1-Trichloroethane	133.41	5.53	4.69	85
1,1-Dichloropropene *				
Carbon Tetrachloride	153.82	6.37	5.34	84
Benzene	78.11	3.24	2.68	83
Dibromomethane *				
1,2-Dichloropropane	112.99	4.68	3.9	83
Trichloroethene	131.39	5.44	4.59	84
Bromodichloromethane *				
2-CEVE *				
cis-1,3-Dichloropropene	110.97	4.60	3.55	77
4-Methyl-2-Pentanone *				
trans-1,3-Dichloropropene	110.97	4.60	3.53	77
1,1,2-Trichloroethane	133.41	5.53	4.56	82
Toluene	92.14	3.82	3.16	83
1,3-Dichloropropane *				

2-Hexanone *				
Dibromochloromethane *				
<b>1,2-Dibromoethane</b>	<b>187.86</b>	<b>7.78</b>	<b>6.53</b>	<b>84</b>
<b>Tetrachloroethene</b>	<b>165.83</b>	<b>6.87</b>	<b>5.59</b>	<b>81</b>
1,1,1,2-Tetrachloroethane *				
<b>Chlorobenzene</b>	<b>112.56</b>	<b>4.66</b>	<b>3.59</b>	<b>77</b>
<b>Ethylbenzene</b>	<b>106.16</b>	<b>4.40</b>	<b>3.45</b>	<b>78</b>
<b>m,p-Xylenes</b>	<b>212.36</b>	<b>8.80</b>	<b>6.85</b>	<b>78</b>
<b>Styrene</b>	<b>104.16</b>	<b>4.31</b>	<b>3.37</b>	<b>78</b>
<b>o-Xylene</b>	<b>106.18</b>	<b>4.40</b>	<b>3.51</b>	<b>80</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>133.41</b>	<b>5.53</b>	<b>5.91</b>	<b>107</b>
1,2,3-Trichloropropane *				
Isopropylbenzene *				
Bromobenzene *				
n-Propylbenzene *				
2-Chlorotoluene *				
4-Chlorotoluene *				
<b>1,3,5-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.09</b>	<b>82</b>
tert-butylbenzene *				
<b>1,2,4-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.11</b>	<b>83</b>
sec-butylbenzene *				
<b>1,3-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.85</b>	<b>80</b>
<b>1,4-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.73</b>	<b>78</b>
p-Isopropyltoluene *				
<b>1,2-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>5.01</b>	<b>82</b>
n-Butylbenzene *				
1,2-Dibromo-3-chloropropane *				
<b>1,2,4-Trichlorobenzene</b>	<b>181.46</b>	<b>7.52</b>	<b>5.44</b>	<b>72</b>
Naphthalene *				
<b>Hexachlorobutadiene</b>	<b>260.76</b>	<b>10.80</b>	<b>8.7</b>	<b>81</b>
1,2,3-Trichlorobenzene *				

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon.	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	201057	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.74	114	351105	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	292717	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	134120	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.10	113	108706	21.49	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.96%		
39) Toluene-d8	14.12	98	384321	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.80%		
53) 4-Bromofluorobenzene	17.76	95	132578	20.67	ug/L	0.00
Spiked Amount 25.000			Recovery =	82.68%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	57530	6.06	ug/L	95
3) Chloromethane	4.90	50	33468	2.13	ug/L	98
4) Vinyl chloride	5.19	62	34821	2.49	ug/L	96
5) Bromomethane	5.78	94	12125	1.91	ug/L	94
6) Chloroethane	5.99	64	18973	2.56	ug/L	90
7) Trichlorofluoromethane	6.79	101	58222	5.99	ug/L	100
8) Acetone	6.94	43	1602	Below Cal	#	85
9) Iodomethane	7.57	142	6053	1.47	ug/L	91
10) 1,1-Dichloroethene	7.52	96	20124	3.55	ug/L	97
11) Methylene chloride	7.72	84	22344	3.35	ug/L	90
12) Freon 113	7.78	101	41757	6.22	ug/L	97
13) Carbon disulfide	8.03	76	10613	0.53	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	558	0.09	ug/L	60
15) MTBE	8.75	73	153	0.01	ug/L	50
16) 1,1-Dichloroethane	8.93	63	44110	3.37	ug/L	99
17) Vinyl acetate	9.09	43	405	0.04	ug/L	83
18) 2-Butanone (MEK)	9.66	72	117	1.25	ug/L	1
19) cis-1,2-Dichloroethene	9.67	96	22148	3.41	ug/L	96
20) Bromochloromethane	0.00	128	0	N.D.		
21) Chloroform	9.94	83	42350	3.92	ug/L	98
22) 2,2-Dichloropropane	0.00	77	0	N.D.		
24) 1,2-Dichloroethane	10.78	62	21923	3.33	ug/L	96
25) 1,1,1-Trichloroethane	10.92	97	36411	4.69	ug/L	98
27) 1,1-Dichloropropene	0.00	75	0	N.D.		
28) Carbon tetrachloride	11.40	117	33155	5.34	ug/L	97
29) Benzene	11.45	78	64449	2.68	ug/L	98
30) Dibromomethane	0.00	93	0	N.D.		
31) 1,2-Dichloropropane	12.22	63	26155	3.90	ug/L	99
32) Trichloroethene	12.28	95	27561	4.59	ug/L	97
33) Bromodichloromethane	12.29	83	154	0.02	ug/L	25
34) 2-Chlorovinylethylether	0.00	63	0	N.D.		
35) cis-1,3-Dichloropropene	13.17	75	30363	3.55	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.33	43	274	0.08	ug/L	50
37) trans-1,3-Dichloropropene	13.74	75	23347	3.53	ug/L	98
38) 1,1,2-Trichloroethane	13.96	83	14497	4.56	ug/L	99
40) Toluene	14.22	92	43103	3.16	ug/L	96
42) 1,3-Dichloropropane	14.21	76	285	0.04	ug/L	44

(#) = qualifier out of range (m) = manual integration  
 03171116.D 031711.M Thu Mar 17 14:49:25 2011

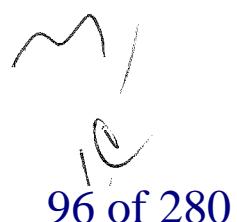
95 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	136	0.06	ug/L #	29
44) Dibromochloromethane	0.00	129	0	N.D.		
45) 1,2-Dibromoethane	14.99	107	21706	6.53	ug/L	99
46) Tetrachloroethene	15.21	166	29329	5.59	ug/L	99
47) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
48) Chlorobenzene	16.12	112	49412	3.59	ug/L	98
49) Ethylbenzene	16.38	91	89509	3.45	ug/L	99
50) m,p-Xylenes	16.64	106	62191	6.85	ug/L	100
51) Styrene	17.10	104	46398	3.37	ug/L	97
52) o-Xylene	17.19	106	30948	3.51	ug/L	97
55) Bromoform	0.00	173	0	N.D.		
56) 1,1,2,2-Tetrachloroethane	17.19	83	23190	5.91	ug/L	95
57) 1,2,3-Trichloropropane	0.00	110	0	N.D.		
58) Isopropylbenzene	17.70	105	1070	0.05	ug/L #	51
59) Bromobenzene	18.06	156	141	0.03	ug/L #	43
60) n-Propylbenzene	18.32	91	1826	0.06	ug/L #	90
61) 2-Chlorotoluene	18.45	91	787	0.05	ug/L #	44
62) 4-Chlorotoluene	18.56	91	1213	0.07	ug/L #	65
63) 1,3,5-Trimethylbenzene	18.71	105	72087	4.06	ug/L	98
64) tert-Butylbenzene	19.09	119	908	0.06	ug/L #	76
65) 1,2,4-Trimethylbenzene	19.24	105	73403	4.11	ug/L	99
66) sec-Butylbenzene	19.24	105	73403	2.83	ug/L #	61
67) 1,3-Dichlorobenzene	19.49	146	46821	4.85	ug/L	100
68) 1,4-Dichlorobenzene	19.58	146	46004	4.73	ug/L	97
69) p-Isopropyltoluene	19.62	119	1222	0.06	ug/L #	89
70) 1,2-Dichlorobenzene	20.02	146	42108	5.01	ug/L	98
71) n-Butylbenzene	20.13	91	3423	0.16	ug/L	97
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.		
73) 1,2,4-Trichlorobenzene	22.29	180	29509	5.44	ug/L	99
74) Naphthalene	22.63	128	15881	2.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	30129	8.70	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	2346	0.53	ug/L	95



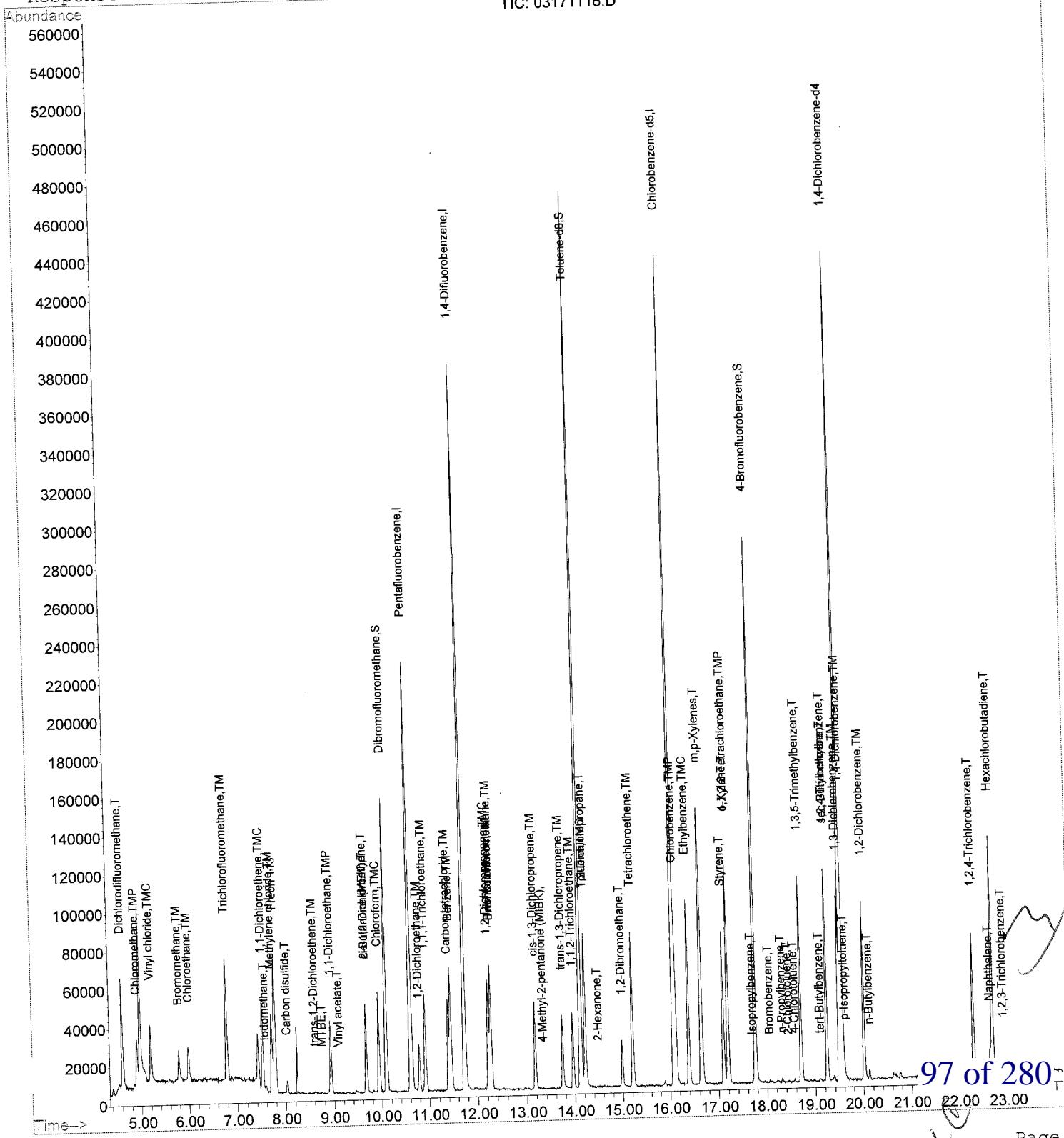
96 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171116.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

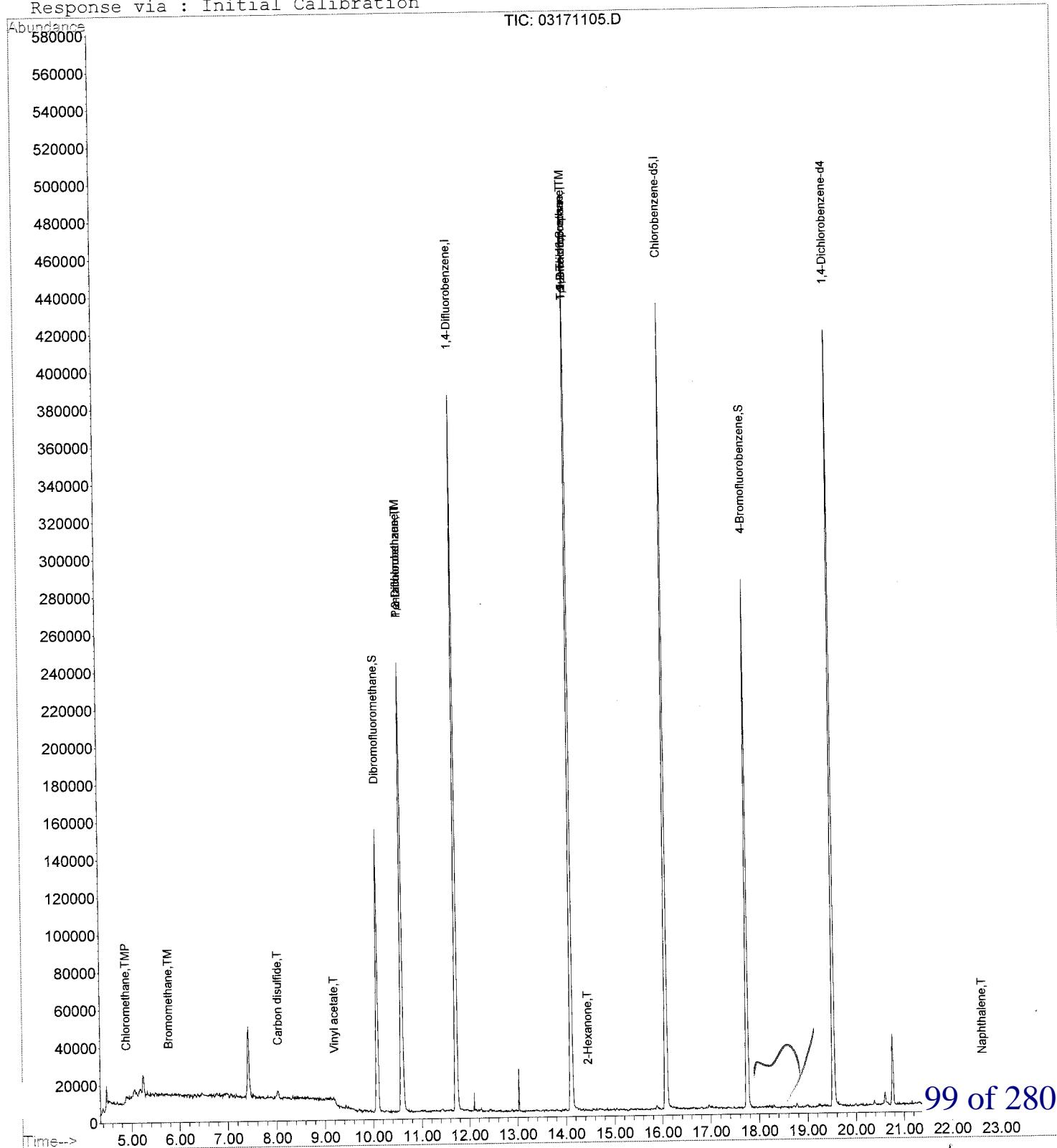
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	110687	22.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.84%		
39) Toluene-d8	14.11	98	374753	21.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.84%		
53) 4-Bromofluorobenzene	17.75	95	131653	21.33	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.32%		
Target Compounds				Qvalue		
3) Chloromethane	4.89	50	1791	0.12	ug/L	12L 98
5) Bromomethane	5.77	94	123	0.28	ug/L	# 76
8) Acetone	6.93	43	3328	Below Cal	#	67
13) Carbon disulfide	8.02	76	5282	0.27	ug/L	100
17) Vinyl acetate	9.19	43	944	0.10	ug/L	# 83
24) 1,2-Dichloroethane	10.60	62	1206	0.19	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.12	76	3863	0.61	ug/L	# 12T 68
43) 2-Hexanone	14.46	43	235	0.11	ug/L	# 12L 29
74) Naphthalene	22.63	128	1667	0.24	ug/L	100

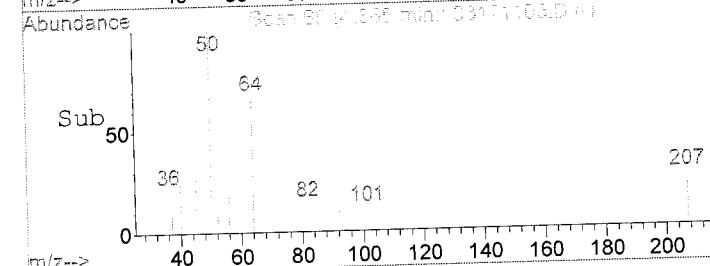
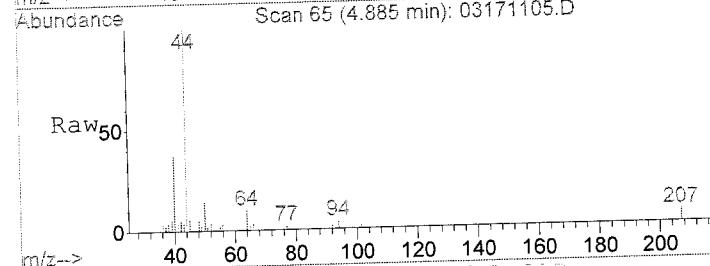
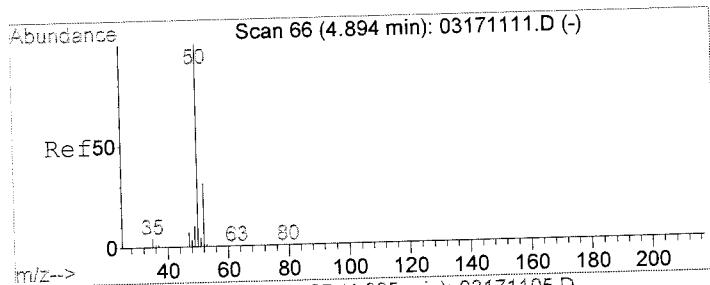
3/18/11  
98 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

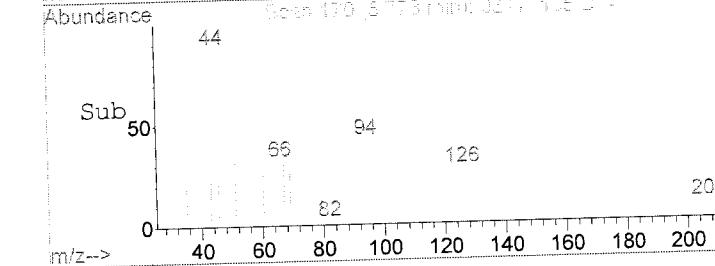
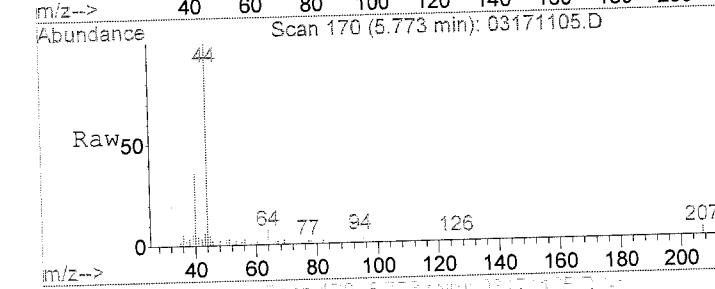
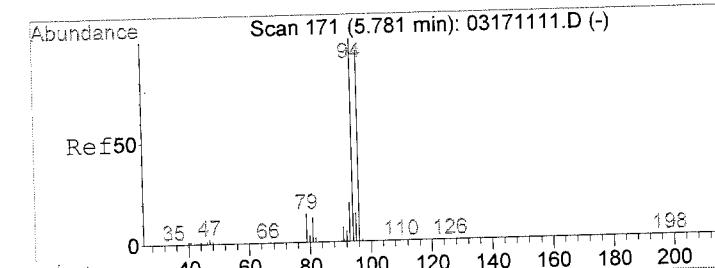
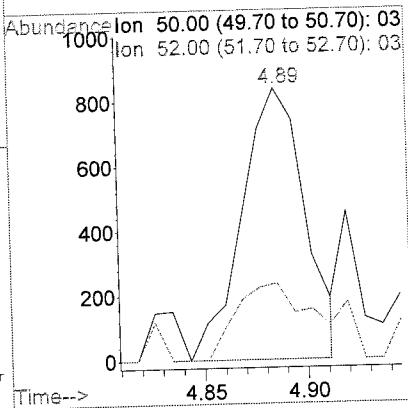
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration





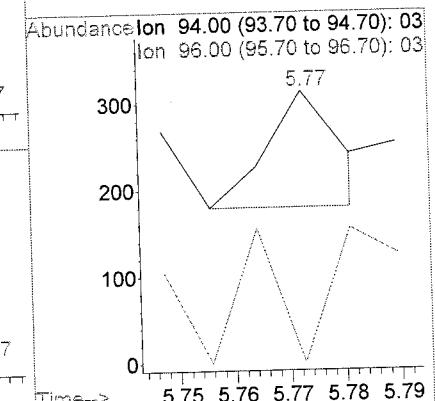
#3  
Chloromethane  
Concen: 0.12 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

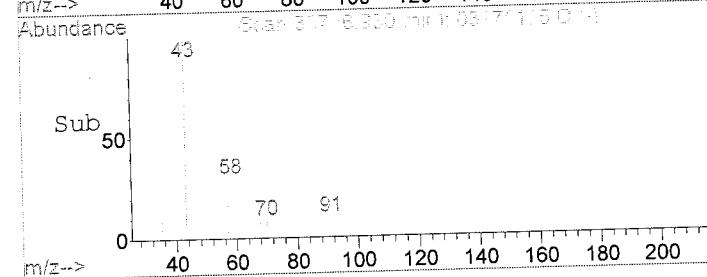
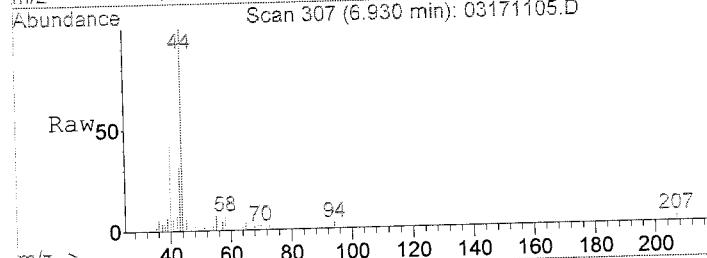
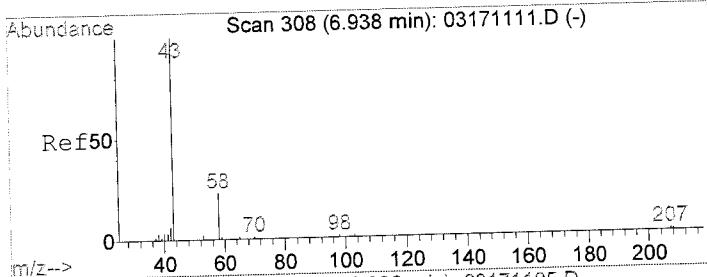
Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.1 37.7



#5  
Bromomethane  
Concen: 0.28 ug/L  
RT: 5.77 min Scan# 170  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

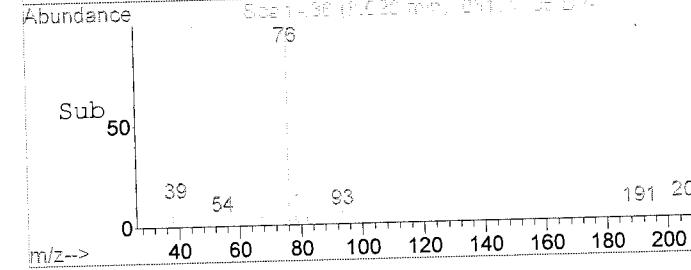
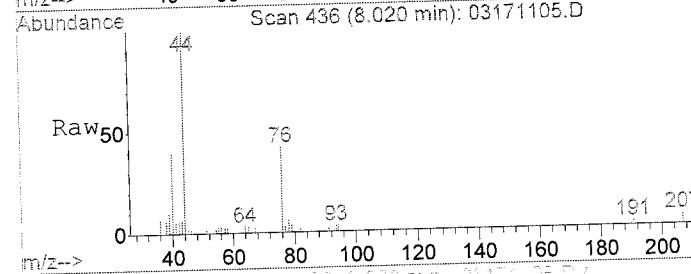
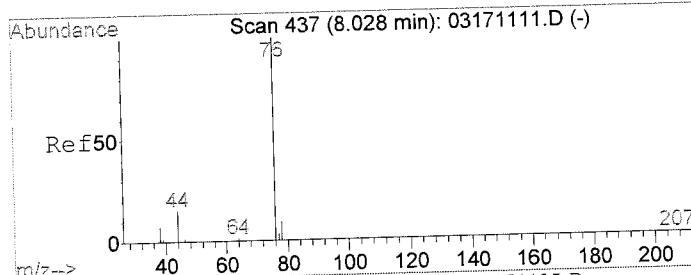
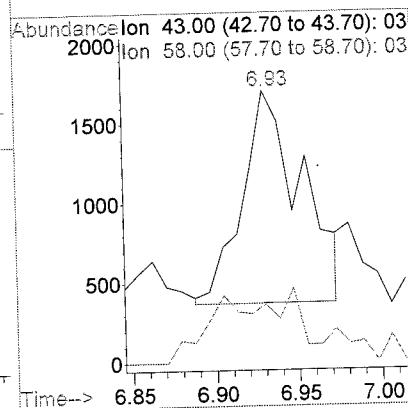
Tgt Ion: 94 Resp: 123  
Ion Ratio Lower Upper  
94 100  
96 115.4 74.0 111.0#





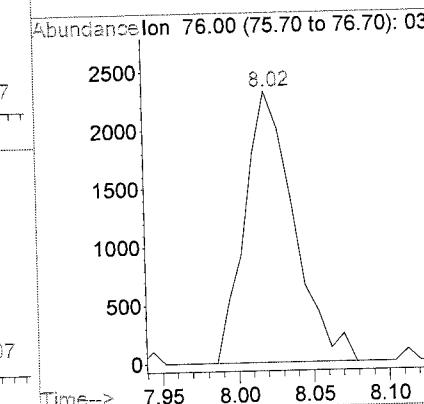
#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 307  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

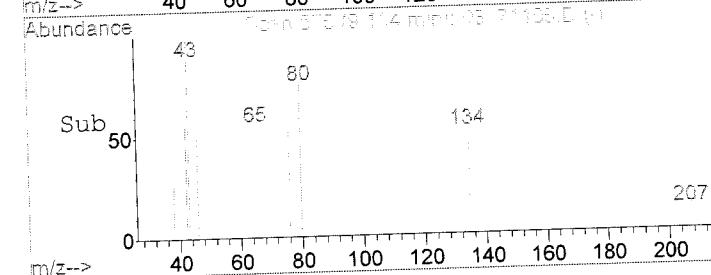
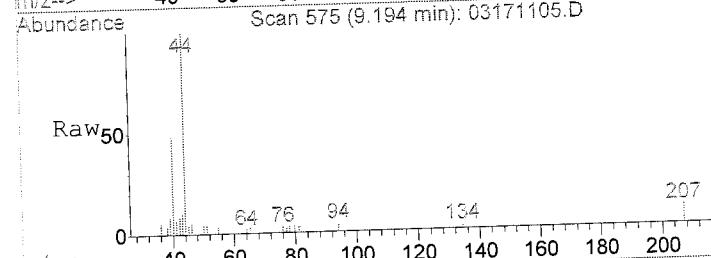
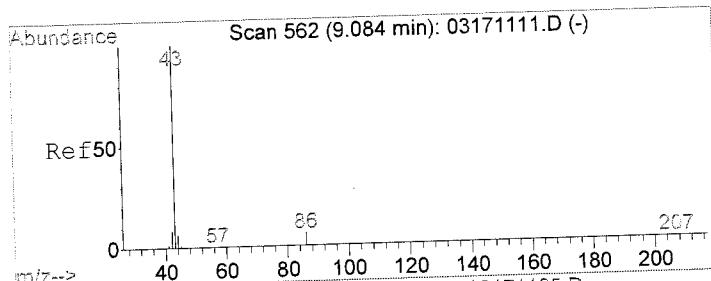
Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 21.2 31.8#



#13  
Carbon disulfide  
Concen: 0.27 ug/L  
RT: 8.02 min Scan# 436  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

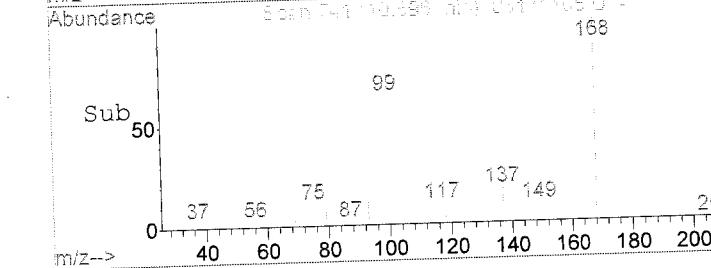
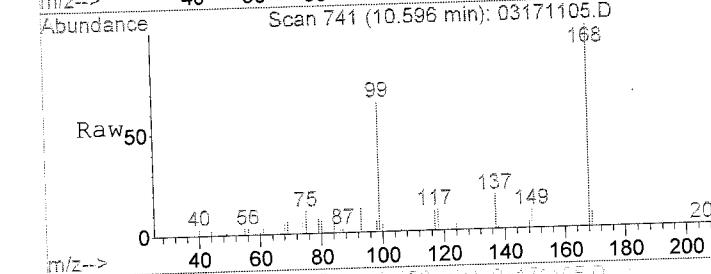
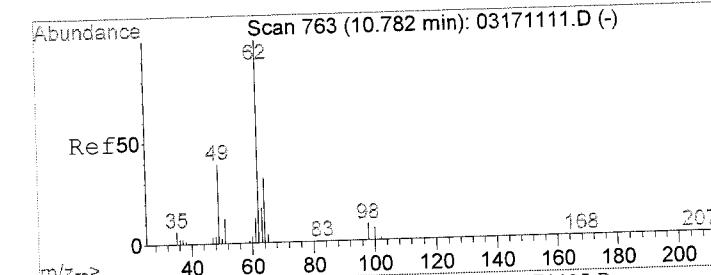
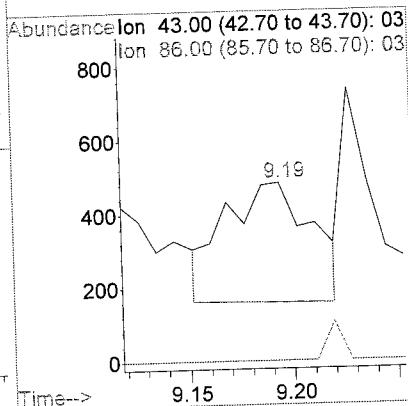
Tgt Ion: 76 Resp: 5282





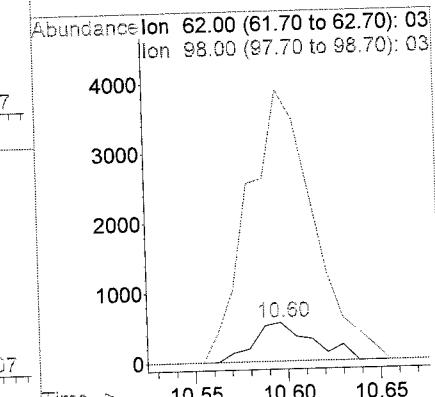
#17  
Vinyl acetate  
Concen: 0.10 ug/L  
RT: 9.19 min Scan# 575  
Delta R.T. 0.11 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

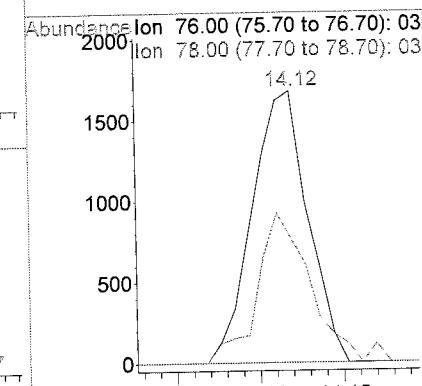
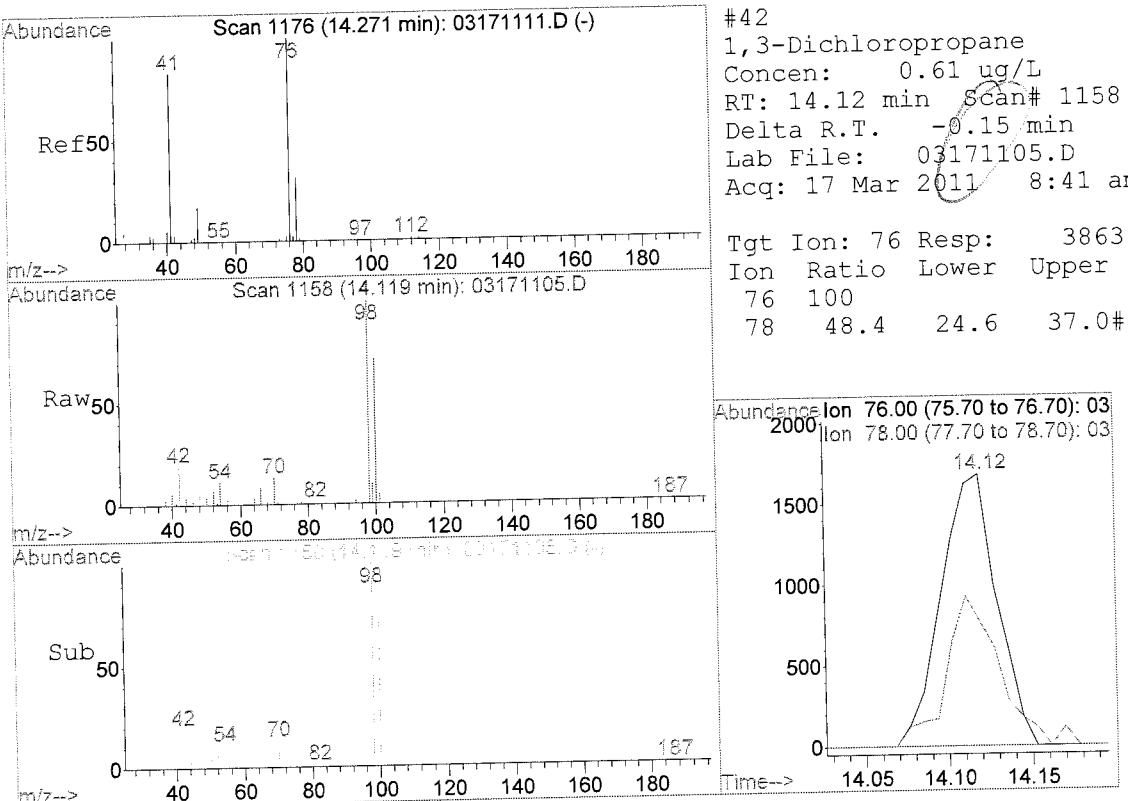
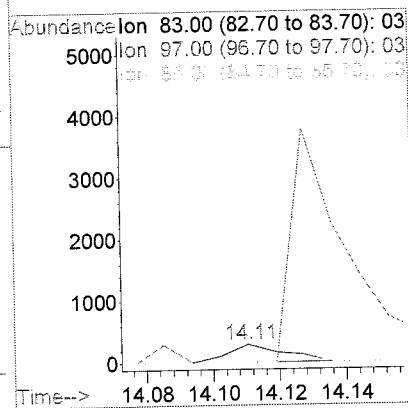
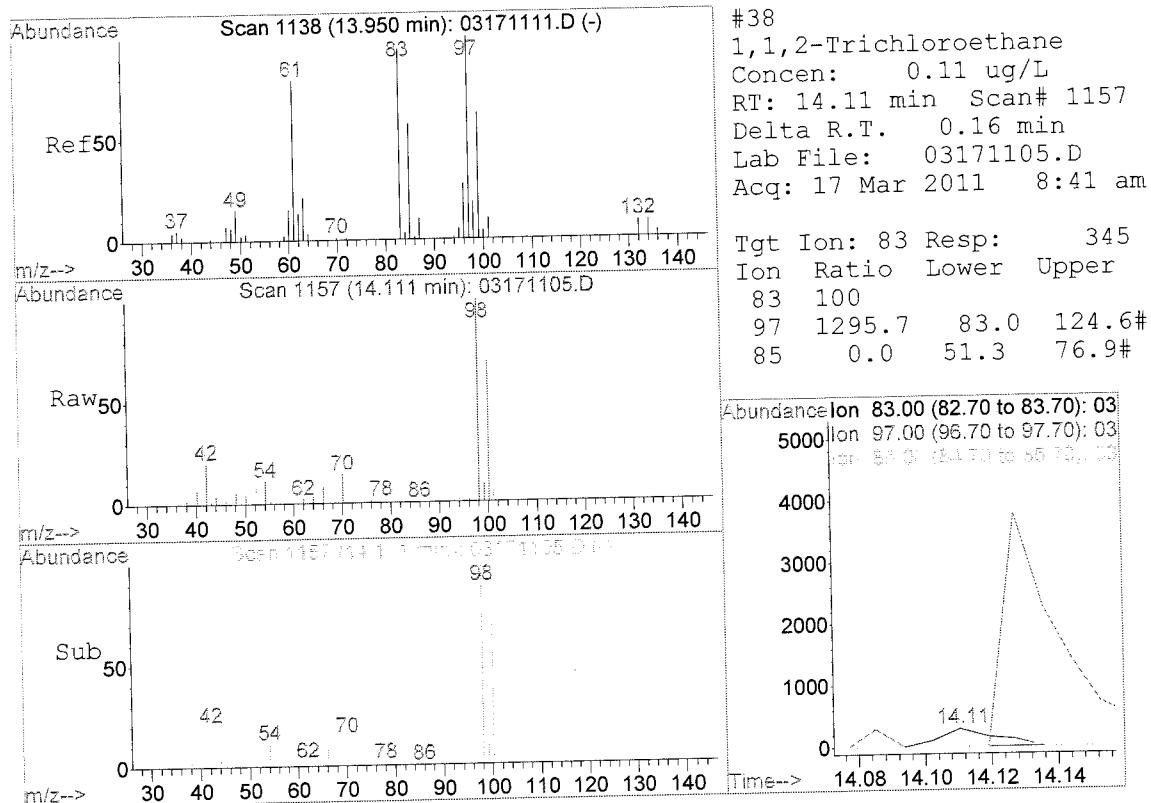
Tgt Ion: 43 Resp: 944  
Ion Ratio Lower Upper  
43 100  
86 0.0 4.6 6.8#

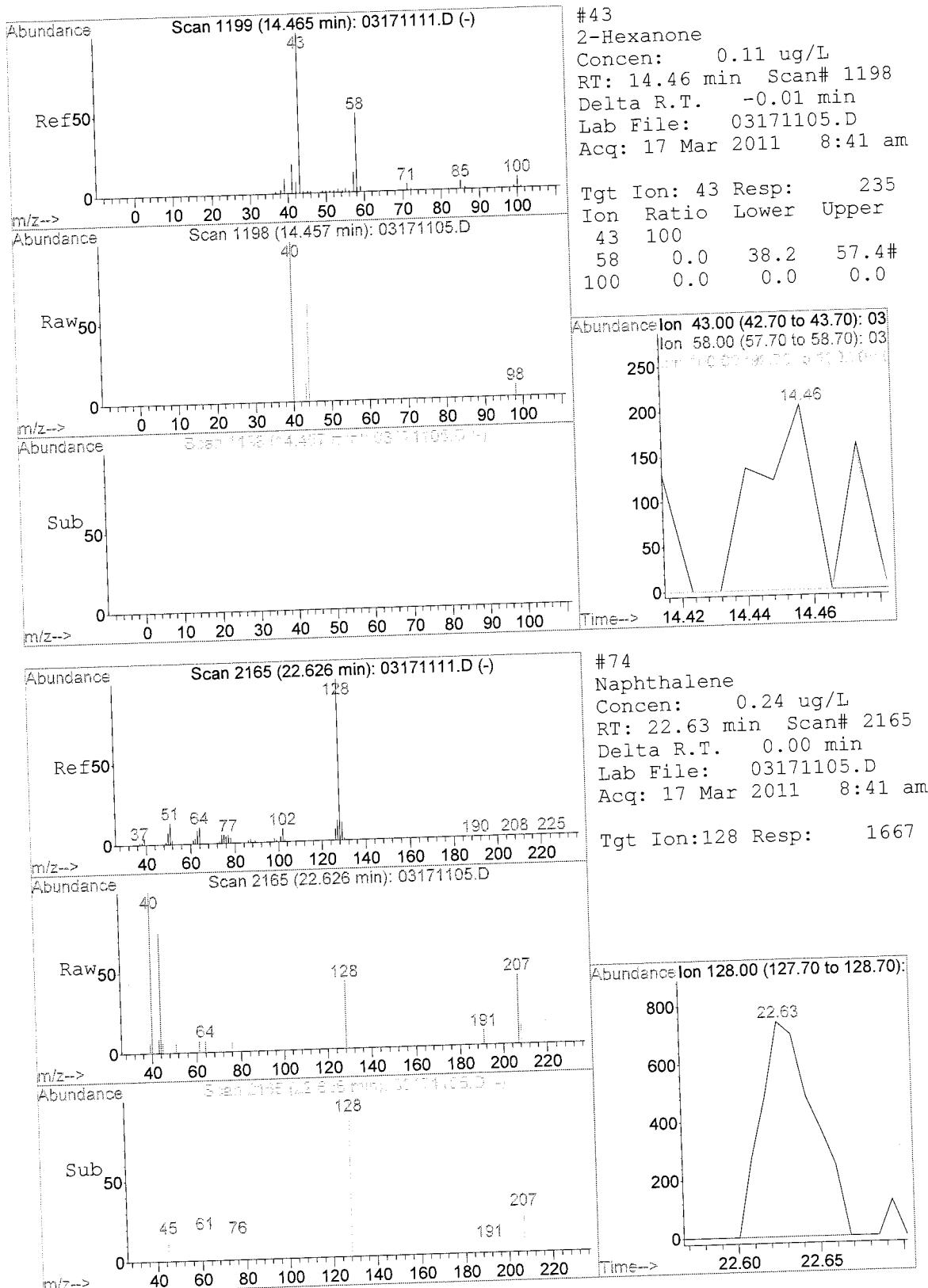


#24  
1,2-Dichloroethane  
Concen: 0.19 ug/L  
RT: 10.60 min Scan# 741  
Delta R.T. -0.19 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 62 Resp: 1206  
Ion Ratio Lower Upper  
62 100  
98 791.2 7.0 10.6#







## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	2490	0.59	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.36%	
39) Toluene-d8	14.12	98	8971	0.60	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.40%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.61	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.44%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	4286	0.54	ug/L	# 90
3) Chloromethane	4.89	50	6587	0.50	ug/L	95
4) Vinyl chloride	5.18	62	6003	0.51	ug/L	90
5) Bromomethane	5.78	94	3084	0.76	ug/L	93
6) Chloroethane	5.97	64	3371	0.55	ug/L	# 73
7) Trichlorofluoromethane	6.77	101	4364	0.54	ug/L	92
8) Acetone	6.93	43	1615	Below Cal	#	66
9) Iodomethane	7.58	142	1272	0.47	ug/L	92
10) 1,1-Dichloroethene	7.50	96	2883	0.61	ug/L	93
11) Methylene chloride	7.70	84	3890	0.70	ug/L	97
12) Freon 113	7.77	101	3509	0.63	ug/L	92
13) Carbon disulfide	8.02	76	10027	0.60	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 92
15) MTBE	8.73	73	5033	0.56	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.54	ug/L	96
17) Vinyl acetate	9.08	43	4816	0.57	ug/L	# 83
18) 2-Butanone (MEK)	9.46	72	199	1.62	ug/L	# 34
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	90
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 93
21) Chloroform	9.93	83	4941	0.55	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.53	ug/L	100
24) 1,2-Dichloroethane	10.77	62	2927	0.53	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.51	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	95
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.54	ug/L	99
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 87
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	# 97
32) Trichloroethene	12.27	95	2709	0.53	ug/L	98
33) Bromodichloromethane	12.33	83	3018	0.50	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	Below Cal	#	55
35) cis-1,3-Dichloropropene	13.18	75	3500	0.48	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	2046	0.69	ug/L	# 82
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.51	ug/L	84
40) Toluene	14.21	92	6374	0.55	ug/L	96
2) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031711.M Fri Mar 18 08:37:04 2011

105 of 280

V Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

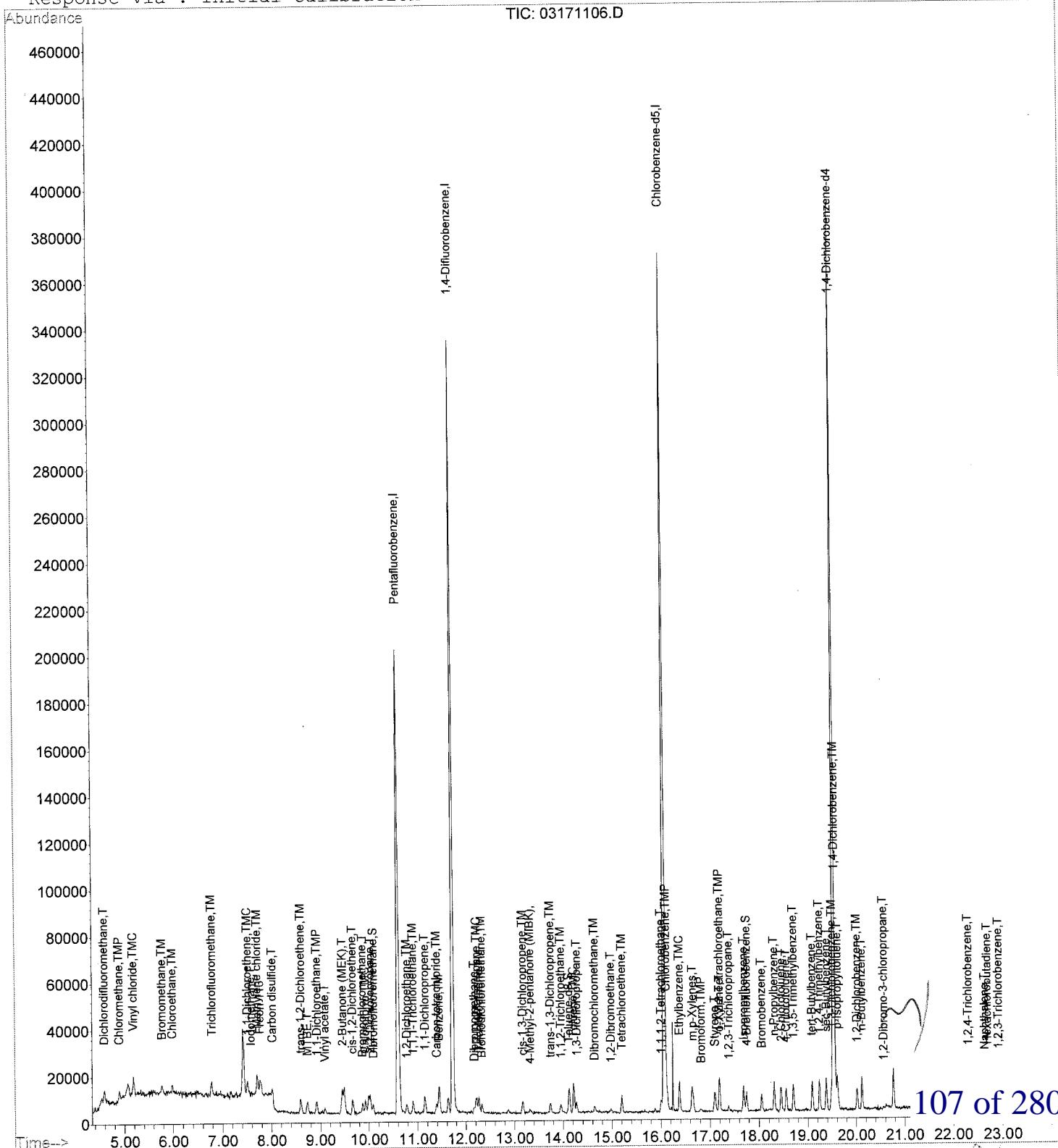
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Dibromochloromethane	14.65	129	2052	0.62	ug/L	85
45) 1,2-Dibromoethane	14.98	107	1293	0.47	ug/L #	78
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.57	ug/L #	53
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.55	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.59	ug/L	95
51) Styrene	17.10	104	5086	0.44	ug/L #	78
52) o-Xylene	17.20	106	4214	0.57	ug/L	96
55) Bromoform	16.81	173	696	0.41	ug/L #	64
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L #	93
57) 1,2,3-Trichloropropane	17.38	110	276	0.37	ug/L #	62
58) Isopropylbenzene	17.70	105	9284	0.52	ug/L	99
59) Bromobenzene	18.05	156	1904	0.46	ug/L	83
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	97
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.53	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.51	ug/L	96
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.52	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L #	87
69) p-Isopropyltoluene	19.61	119	8395	0.49	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.54	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.50	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	71	0.16	ug/L #	14
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.46	ug/L	81
74) Naphthalene	22.63	128	4307	0.69	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	0.48	ug/L #	65
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.51	ug/L	87

106 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
Acq On : 17 Mar 2011 9:12 am Operator: LC  
Sample : 0.5 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES

Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	3898	0.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	3.76%		
39) Toluene-d8	14.12	98	14880	1.01	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.04%		
53) 4-Bromofluorobenzene	17.76	95	5477	1.03	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.12%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.58	85	7417	0.96	ug/L	94
3) Chloromethane	4.89	50	11297	0.88	ug/L	99
4) Vinyl chloride	5.18	62	11731	1.03	ug/L #	84
5) Bromomethane	5.77	94	5200	1.12	ug/L	94
6) Chloroethane	5.98	64	6815	1.13	ug/L #	88
7) Trichlorofluoromethane	6.77	101	8152	1.03	ug/L	91
8) Acetone	6.93	43	2180	Below Cal		96
9) Iodomethane	7.57	142	3864	1.18	ug/L #	86
10) 1,1-Dichloroethene	7.51	96	5486	1.19	ug/L	97
11) Methylene chloride	7.70	84	6767	1.24	ug/L	92
12) Freon 113	7.78	101	6284	1.15	ug/L	98
13) Carbon disulfide	8.02	76	17829	1.08	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.19	ug/L	85
15) MTBE	8.73	73	10605	1.21	ug/L #	88
16) 1,1-Dichloroethane	8.92	63	12255	1.15	ug/L #	97
17) Vinyl acetate	9.09	43	9903	1.19	ug/L #	93
18) 2-Butanone (MEK)	9.48	72	190	1.60	ug/L #	1
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L	96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L	97
21) Chloroform	9.93	83	8465	0.96	ug/L	99
22) 2,2-Dichloropropane	10.03	77	6968	0.98	ug/L #	90
24) 1,2-Dichloroethane	10.78	62	5936	1.10	ug/L #	76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.97	ug/L #	56
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L #	93
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L	98
29) Benzene	11.44	78	20409	1.02	ug/L	97
30) Dibromomethane	12.17	93	2529	1.07	ug/L	94
31) 1,2-Dichloropropane	12.21	63	5383	0.96	ug/L #	90
32) Trichloroethene	12.26	95	4847	0.97	ug/L	95
33) Bromodichloromethane	12.32	83	5644	0.96	ug/L #	87
34) 2-Chlorovinylethylether	12.86	63	1739	0.28	ug/L #	80
35) cis-1,3-Dichloropropene	13.18	75	6952	0.98	ug/L	95
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.19	ug/L #	89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.99	ug/L #	84
40) Toluene	14.22	92	10459	0.92	ug/L	93
42) 1,3-Dichloropropane	14.27	76	5543	1.01	ug/L #	75

(#) = qualifier out of range (m) = manual integration

03171107.D 031711.M Fri Mar 18 08:37:19 2011

108 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.37	ug/L #	71
44) Dibromochloromethane	14.65	129	2863	0.86	ug/L	97
45) 1,2-Dibromoethane	14.98	107	2446	0.88	ug/L #	77
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	94
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.00	ug/L #	59
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	93
49) Ethylbenzene	16.38	91	20598	0.96	ug/L	98
50) m,p-Xylenes	16.64	106	6910	0.92	ug/L	93
51) Styrene	17.10	104	10355	0.90	ug/L	99
52) o-Xylene	17.20	106	7210	0.98	ug/L	87
55) Bromoform	16.81	173	1545	0.94	ug/L #	76
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L #	91
57) 1,2,3-Trichloropropane	17.38	110	807	1.12	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.94	ug/L	99
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.97	ug/L	100
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.95	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.97	ug/L	99
66) sec-Butylbenzene	19.38	105	21187	0.97	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	93
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	97
69) p-Isopropyltoluene	19.61	119	15312	0.92	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.94	ug/L	99
71) n-Butylbenzene	20.11	91	17346	0.93	ug/L	96
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.89	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	4683	1.02	ug/L	95
74) Naphthalene	22.63	128	5978	0.99	ug/L	100
75) Hexachlorobutadiene	22.68	225	2850	0.98	ug/L	89
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.93	ug/L	93

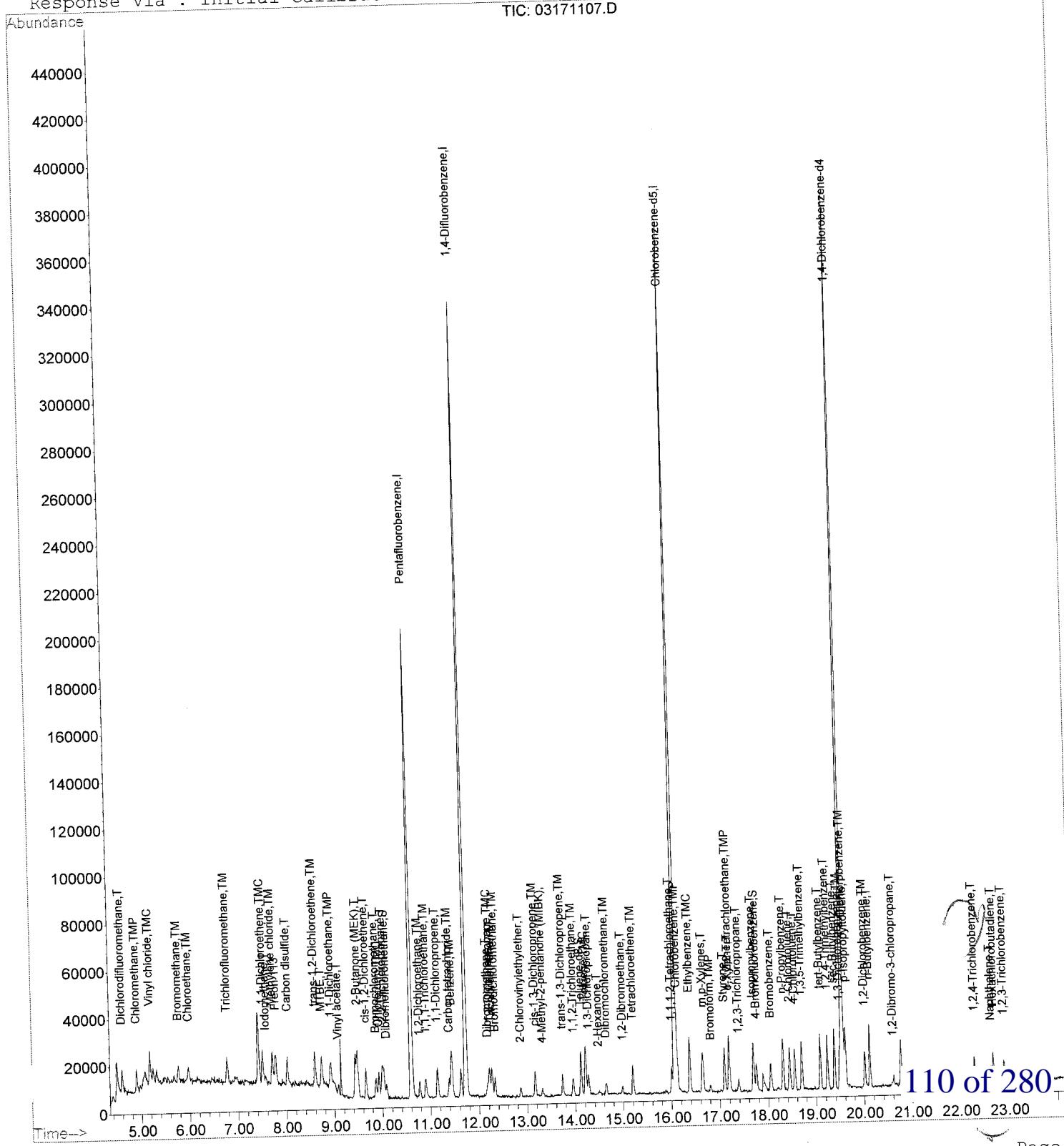
109 of 280

Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171107.D 031711.M

Fri Mar 18 08:37:20 2011

Page 3

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	7767	1.85	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.40%		
39) Toluene-d8	14.12	98	28802	1.93	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.72%		
53) 4-Bromofluorobenzene	17.75	95	10411	1.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	15723	1.99	ug/L	96
3) Chloromethane	4.89	50	22795	1.75	ug/L	97
4) Vinyl chloride	5.18	62	22297	1.92	ug/L	95
5) Bromomethane	5.77	94	6970	1.40	ug/L	99
6) Chloroethane	5.98	64	11754	1.91	ug/L	# 83
7) Trichlorofluoromethane	6.78	101	16143	2.00	ug/L	99
8) Acetone	6.94	43	4997	1.82	ug/L	✓ 99
9) Iodomethane	7.57	142	5343	1.55	ug/L	93
10) 1,1-Dichloroethene	7.51	96	8308	1.76	ug/L	96
11) Methylene chloride	7.71	84	10726	1.93	ug/L	98
12) Freon 113	7.77	101	10221	1.83	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.80	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.83	ug/L	97
15) MTBE	8.73	73	16615	1.86	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.89	ug/L	98
17) Vinyl acetate	9.08	43	14566	1.72	ug/L	# 95
18) 2-Butanone (MEK)	9.47	72	179	1.55	ug/L	# 1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.02	ug/L	92
20) Bromochloromethane	9.88	128	3627	1.84	ug/L	95
21) Chloroform	9.93	83	18162	2.02	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.93	ug/L	98
24) 1,2-Dichloroethane	10.78	62	10721	1.96	ug/L	# 93
25) 1,1,1-Trichloroethane	10.91	97	12034	1.87	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	98
28) Carbon tetrachloride	11.38	117	9830	1.88	ug/L	94
29) Benzene	11.44	78	39494	1.95	ug/L	100
30) Dibromomethane	12.17	93	4597	1.92	ug/L	92
31) 1,2-Dichloropropane	12.22	63	10960	1.93	ug/L	# 96
32) Trichloroethene	12.27	95	9761	1.92	ug/L	96
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	# 96
34) 2-Chlorovinylethylether	12.87	63	2637	1.16	ug/L	# 83
35) cis-1,3-Dichloropropene	13.16	75	13465	1.86	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.79	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.86	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.95	ug/L	96
40) Toluene	14.21	92	22811	1.98	ug/L	95
42) 1,3-Dichloropropane	14.28	76	10418	1.88	ug/L	90

(#) = qualifier out of range (m) = manual integration

03171108.D 031711.M Fri Mar 18 08:37:34 2011

111 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

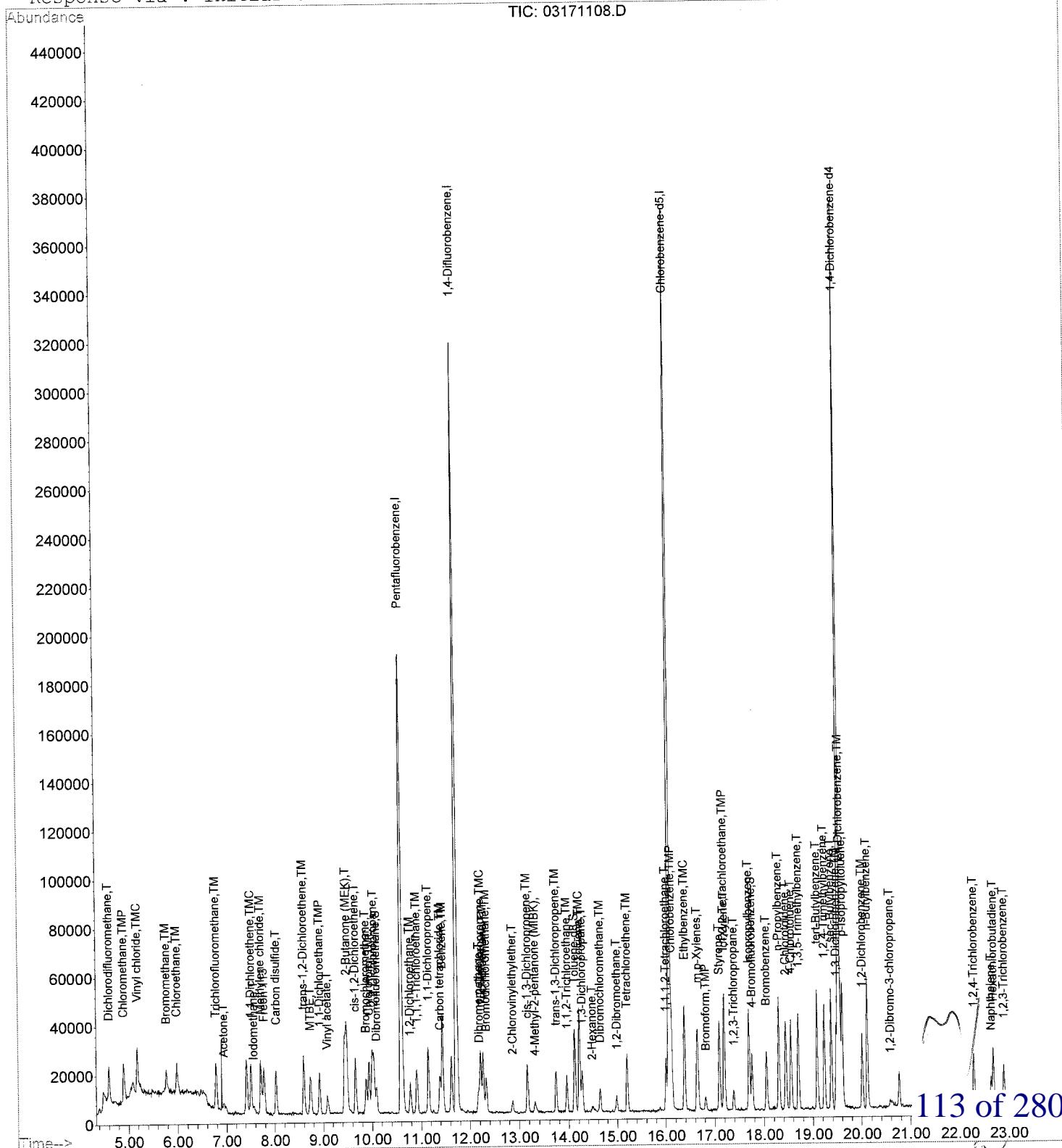
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2474	1.34	ug/L #	88
44) Dibromochloromethane	14.65	129	6238	1.88	ug/L	98
45) 1,2-Dibromoethane	14.99	107	5443	1.96	ug/L #	98
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.88	ug/L	92
48) Chlorobenzene	16.12	112	21803	1.90	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.88	ug/L	100
50) m,p-Xylenes	16.64	106	14567	1.92	ug/L	98
51) Styrene	17.09	104	21955	1.91	ug/L	99
52) o-Xylene	17.19	106	14080	1.91	ug/L	99
55) Bromoform	16.81	173	2978	1.82	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	93
57) 1,2,3-Trichloropropane	17.40	110	1450	2.02	ug/L	94
58) Isopropylbenzene	17.69	105	34246	1.98	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	96
60) n-Propylbenzene	18.30	91	47531	1.93	ug/L	98
61) 2-Chlorotoluene	18.44	91	27642	1.91	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.91	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.91	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.96	ug/L	95
66) sec-Butylbenzene	19.38	105	43119	1.98	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	16064	1.98	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	99
69) p-Isopropyltoluene	19.61	119	32053	1.93	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	13744	1.95	ug/L	97
71) n-Butylbenzene	20.12	91	35106	1.90	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.21	ug/L #	79
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.83	ug/L	96
74) Naphthalene	22.63	128	10824	1.79	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.96	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.89	ug/L	94

112 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
Acq On : 17 Mar 2011 10:14 am Operator: LC  
Sample : 2.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171108.D 031711.M

Fri Mar 18 08:37:35 2011

113 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00
 System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	22772	5.52	ug/L	0.00
Spiked Amount 25.000			Recovery =	22.08%		
39) Toluene-d8	14.12	98	75601	5.05	ug/L	0.00
Spiked Amount 25.000			Recovery =	20.20%		
53) 4-Bromofluorobenzene	17.75	95	27636	5.10	ug/L	0.00
Spiked Amount 25.000			Recovery =	20.40%		
 Target Compounds						
2) Dichlorodifluoromethane	4.60	85	43993	5.68	ug/L	96
3) Chloromethane	4.90	50	69304	5.42	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.23	ug/L	97
5) Bromomethane	5.77	94	23286	4.14	ug/L	93
6) Chloroethane	5.98	64	31380	5.20	ug/L	95
7) Trichlorofluoromethane	6.78	101	44900	5.67	ug/L	97
8) Acetone	6.94	43	8551	6.12	ug/L	98
9) Iodomethane	7.57	142	19144	5.33	ug/L	97
10) 1,1-Dichloroethene	7.51	96	23635	5.12	ug/L	97
11) Methylene chloride	7.71	84	29505	5.43	ug/L	97
12) Freon 113	7.78	101	28220	5.16	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.39	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.35	ug/L	91
15) MTBE	8.74	73	47481	5.43	ug/L	99
16) 1,1-Dichloroethane	8.92	63	57409	5.38	ug/L	99
17) Vinyl acetate	9.09	43	45219	5.46	ug/L	98
18) 2-Butanone (MEK)	9.47	72	1224	5.50	ug/L #	37
19) cis-1,2-Dichloroethene	9.66	96	29437	5.56	ug/L	94
20) Bromochloromethane	9.87	128	11063	5.71	ug/L	95
21) Chloroform	9.93	83	49311	5.60	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.54	ug/L	100
24) 1,2-Dichloroethane	10.78	62	29254	5.45	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.54	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.40	ug/L	98
29) Benzene	11.44	78	106054	5.22	ug/L	98
30) Dibromomethane	12.17	93	12758	5.31	ug/L	97
31) 1,2-Dichloropropane	12.21	63	30926	5.45	ug/L	99
32) Trichloroethene	12.26	95	27719	5.46	ug/L	95
33) Bromodichloromethane	12.33	83	32710	5.49	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.89	ug/L	96
35) cis-1,3-Dichloropropene	13.17	75	39480	5.45	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	5.15	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.40	ug/L	99
40) Toluene	14.21	92	60380	5.23	ug/L	98
42) 1,3-Dichloropropane	14.27	76	31749	5.68	ug/L	98

(#= qualifier out of range (m)= manual integration)

(03171109.D 031711.M Fri Mar 18 08:37:49 2011)

114 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.70	ug/L #	86
44) Dibromochloromethane	14.64	129	17145	5.10	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.66	ug/L #	98
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.02	ug/L	96
48) Chlorobenzene	16.12	112	60084	5.17	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.13	ug/L	99
50) m,p-Xylenes	16.64	106	39718	5.18	ug/L	100
51) Styrene	17.09	104	62548	5.38	ug/L	98
52) o-Xylene	17.20	106	38050	5.11	ug/L	98
55) Bromoform	16.81	173	9209	5.49	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	4203	5.70	ug/L	90
58) Isopropylbenzene	17.69	105	91339	5.15	ug/L	98
59) Bromobenzene	18.05	156	21568	5.27	ug/L	95
60) n-Propylbenzene	18.30	91	134531	5.32	ug/L	98
61) 2-Chlorotoluene	18.45	91	75803	5.11	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	97
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.17	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.10	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.13	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.17	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	42641	5.12	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.11	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.28	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.24	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.73	ug/L	90
73) 1,2,4-Trichlorobenzene	22.28	180	24323	5.20	ug/L	100
74) Naphthalene	22.63	128	32491	5.23	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.92	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	20581	5.39	ug/L	98

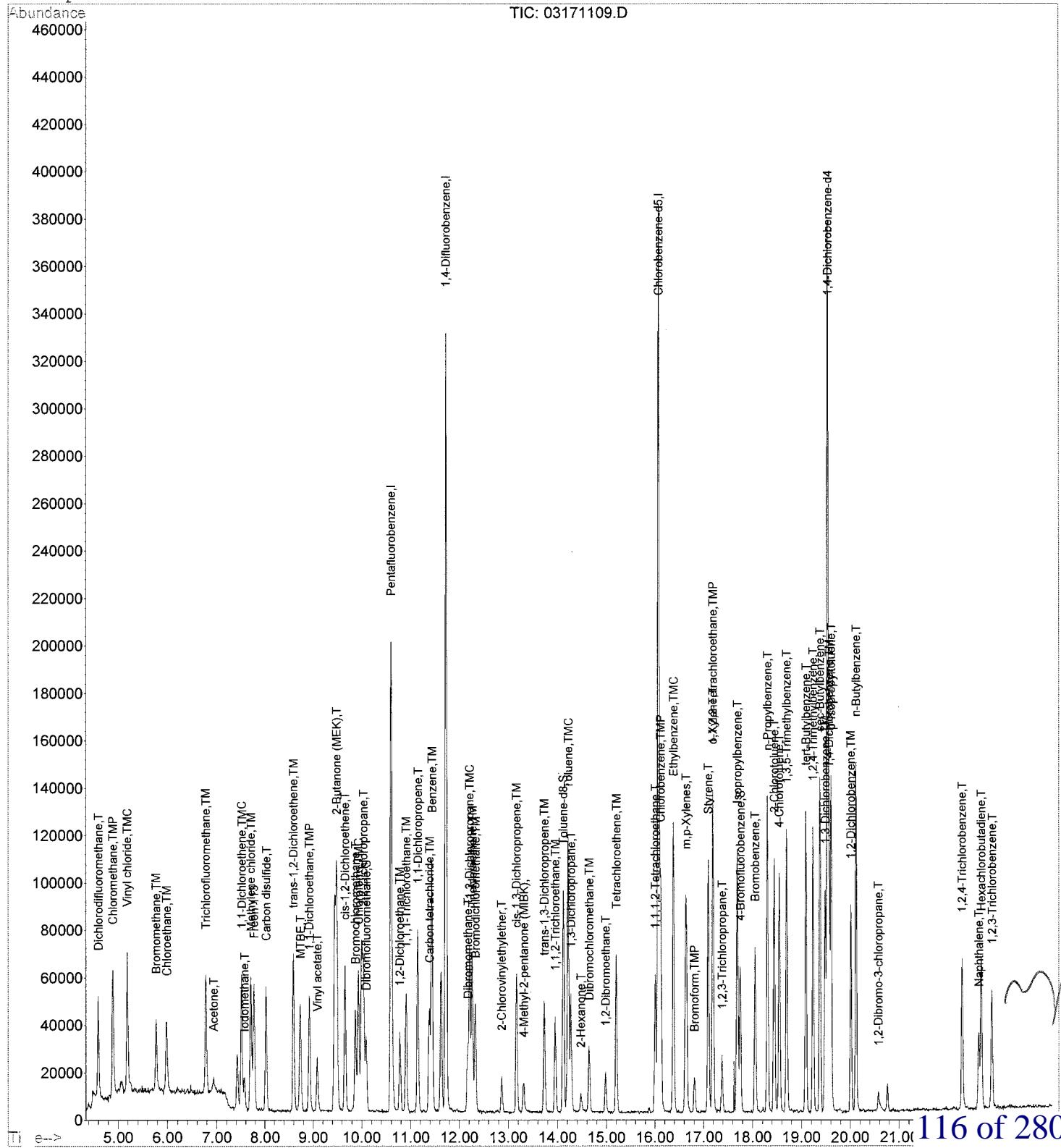


## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
Acq On : 17 Mar 2011 10:45 am Operator: LC  
Sample : 5.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171109.D 031711.M

Fri Mar 18 08:37:50 2011

116 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	42710	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery = 40.72%			
39) Toluene-d8	14.12	98	143321	9.62	ug/L	0.00
Spiked Amount 25.000			Recovery = 38.48%			
53) 4-Bromofluorobenzene	17.75	95	50923	9.49	ug/L	0.00
Spiked Amount 25.000			Recovery = 37.96%			
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	79957	10.15	ug/L	99
3) Chloromethane	4.89	50	135497	10.40	ug/L	99
4) Vinyl chloride	5.19	62	111850	9.64	ug/L	99
5) Bromomethane	5.78	94	53427	9.01	ug/L	95
6) Chloroethane	5.98	64	63788	10.38	ug/L	99
7) Trichlorofluoromethane	6.78	101	85392	10.59	ug/L	98
8) Acetone	6.94	43	11502	9.36	ug/L	99
9) Iodomethane	7.57	142	36401	9.84	ug/L	98
10) 1,1-Dichloroethene	7.51	96	46909	9.97	ug/L	96
11) Methylene chloride	7.71	84	55460	10.02	ug/L	99
12) Freon 113	7.78	101	52409	9.41	ug/L	98
13) Carbon disulfide	8.03	76	162804	9.73	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.82	ug/L	96
15) MTBE	8.74	73	84759	9.53	ug/L	97
16) 1,1-Dichloroethane	8.92	63	108838	10.03	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.70	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	10.73	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	53573	9.94	ug/L	99
20) Bromochloromethane	9.88	128	20976	10.64	ug/L	99
21) Chloroform	9.93	83	95119	10.62	ug/L	100
22) 2,2-Dichloropropane	10.04	77	73939	10.18	ug/L	99
24) 1,2-Dichloroethane	10.77	62	53618	9.81	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	66517	10.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.20	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.38	ug/L	99
29) Benzene	11.44	78	201076	9.95	ug/L	99
30) Dibromomethane	12.17	93	24596	10.29	ug/L	97
31) 1,2-Dichloropropane	12.21	63	55294	9.80	ug/L	99
32) Trichloroethene	12.27	95	49861	9.87	ug/L	99
33) Bromodichloromethane	12.33	83	60334	10.17	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	11.51	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	73950	10.27	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.82	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.25	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	27640	10.34	ug/L	98
40) Toluene	14.21	92	114354	9.95	ug/L	98
42) 1,3-Dichloropropane	14.27	76	56624	10.22	ug/L	100

(#) = qualifier out of range (m) = manual integration

03171110.D 031711.M Fri Mar 18 08:38:05 2011

117 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

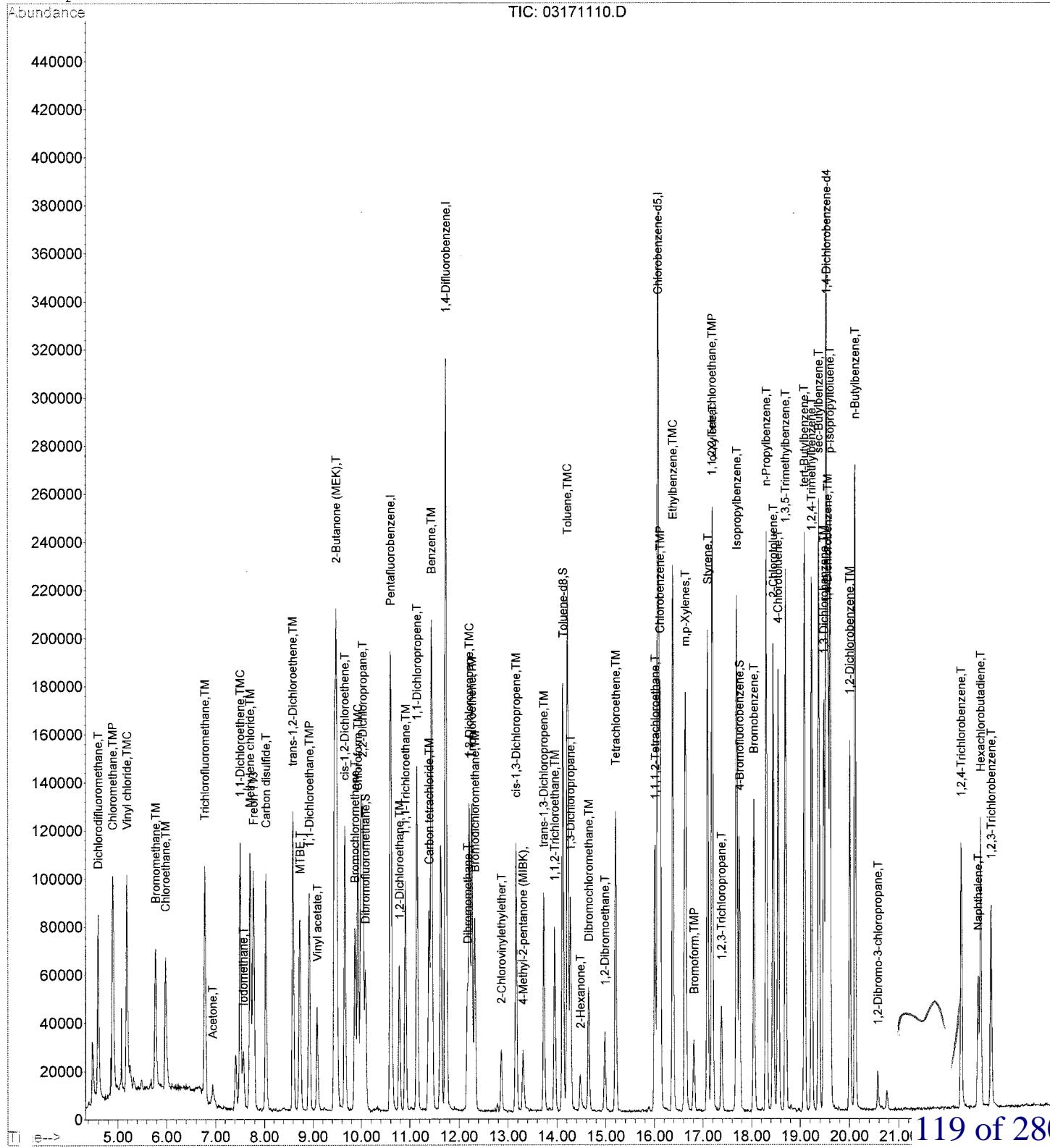
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.53	ug/L #	98
44) Dibromochloromethane	14.64	129	32389	9.72	ug/L	99
45) 1,2-Dibromoethane	14.98	107	28536	10.26	ug/L	97
46) Tetrachloroethene	15.21	166	44478	10.13	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	9.79	ug/L	98
48) Chlorobenzene	16.12	112	113625	9.87	ug/L	99
49) Ethylbenzene	16.38	91	215370	9.93	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.77	ug/L	99
51) Styrene	17.09	104	115227	10.01	ug/L	99
52) o-Xylene	17.20	106	71920	9.74	ug/L	100
55) Bromoform	16.81	173	16316	10.27	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L #	97
57) 1,2,3-Trichloropropane	17.39	110	7243	10.36	ug/L	91
58) Isopropylbenzene	17.69	105	176438	10.50	ug/L	99
59) Bromobenzene	18.05	156	40825	10.53	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.45	ug/L	99
61) 2-Chlorotoluene	18.45	91	143690	10.22	ug/L	100
62) 4-Chlorotoluene	18.55	91	141563	10.16	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.42	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.37	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.25	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.17	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.41	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	69024	10.04	ug/L	98
71) n-Butylbenzene	20.12	91	183374	10.17	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	10.84	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	41924	9.44	ug/L	100
74) Naphthalene	22.63	128	55616	9.45	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.24	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	34759	9.60	ug/L	98

118 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
Acq On : 17 Mar 2011 11:15 am Operator: LC  
Sample : 10 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171110.D 031711.M

Fri Mar 18 08:38:06 2011

119 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	103380	25.00	ug/L	0.00
Spiked Amount 25.000			Recovery = 100.00%			
39) Toluene-d8	14.12	98	359841	24.50	ug/L	0.00
Spiked Amount 25.000			Recovery = 98.00%			
53) 4-Bromofluorobenzene	17.75	95	128707	24.22	ug/L	0.00
Spiked Amount 25.000			Recovery = 96.88%			
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	200064	25.77	ug/L	100
3) Chloromethane	4.89	50	322628	25.13	ug/L	100
4) Vinyl chloride	5.18	62	283499	24.80	ug/L	100
5) Bromomethane	5.78	94	141242	23.74	ug/L	100
6) Chloroethane	5.98	64	150117	24.77	ug/L	100
7) Trichlorofluoromethane	6.78	101	214158	26.95	ug/L	100
8) Acetone	6.94	43	25928	26.49	ug/L	100
9) Iodomethane	7.57	142	98109	26.69	ug/L	100
10) 1,1-Dichloroethene	7.51	96	111502	24.05	ug/L	100
11) Methylene chloride	7.71	84	132209	24.24	ug/L	100
12) Freon 113	7.77	101	133636	24.35	ug/L	100
13) Carbon disulfide	8.03	76	401884	24.37	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.73	ug/L	100
15) MTBE	8.74	73	214946	24.52	ug/L	100
16) 1,1-Dichloroethane	8.92	63	264682	24.74	ug/L	100
17) Vinyl acetate	9.08	43	202265	24.34	ug/L	100
18) 2-Butanone (MEK)	9.47	72	6903	26.82	ug/L	100
19) cis-1,2-Dichloroethene	9.66	96	131490	24.75	ug/L	100
20) Bromochloromethane	9.87	128	47437	24.40	ug/L	100
21) Chloroform	9.93	83	218360	24.73	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	25.16	ug/L	100
24) 1,2-Dichloroethane	10.78	62	136474	25.33	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	162207	25.58	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.69	ug/L	100
28) Carbon tetrachloride	11.39	117	133369	25.91	ug/L	100
29) Benzene	11.44	78	490622	24.62	ug/L	100
30) Dibromomethane	12.17	93	58067	24.63	ug/L	100
31) 1,2-Dichloropropane	12.21	63	140014	25.15	ug/L	100
32) Trichloroethene	12.27	95	124690	25.02	ug/L	100
33) Bromodichloromethane	12.33	83	150764	25.77	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	28.39	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	183565	25.85	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	24.58	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.79	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	25.19	ug/L	100
40) Toluene	14.21	92	282149	24.90	ug/L	100
42) 1,3-Dichloropropane	14.27	76	140210	25.55	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031711.M Fri Mar 18 08:38:20 2011

120 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	24.30	ug/L #	100
44) Dibromochloromethane	14.64	129	81864	24.81	ug/L	100
45) 1,2-Dibromoethane	14.98	107	70424	25.57	ug/L	100
46) Tetrachloroethene	15.21	166	109364	25.15	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	24.44	ug/L	100
48) Chlorobenzene	16.12	112	284407	24.96	ug/L	100
49) Ethylbenzene	16.37	91	538674	25.09	ug/L	100
50) m,p-Xylenes	16.64	106	186494	24.80	ug/L	100
51) Styrene	17.09	104	295005	25.87	ug/L	100
52) o-Xylene	17.19	106	177920	24.34	ug/L	100
55) Bromoform	16.81	173	42372	26.07	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	25.00	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18834	26.34	ug/L	100
58) Isopropylbenzene	17.69	105	445254	25.90	ug/L	100
59) Bromobenzene	18.05	156	105054	26.49	ug/L	100
60) n-Propylbenzene	18.30	91	632559	25.78	ug/L	100
61) 2-Chlorotoluene	18.44	91	364433	25.35	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.89	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.71	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.63	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.64	ug/L	100
66) sec-Butylbenzene	19.37	105	556785	25.69	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	205642	25.45	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	201942	24.82	ug/L	100
69) p-Isopropyltoluene	19.61	119	434002	26.19	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.44	ug/L	100
71) n-Butylbenzene	20.12	91	487367	26.43	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	25.84	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	122376	26.96	ug/L	100
74) Naphthalene	22.63	128	163821	27.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	26.49	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	101564	27.44	ug/L	100

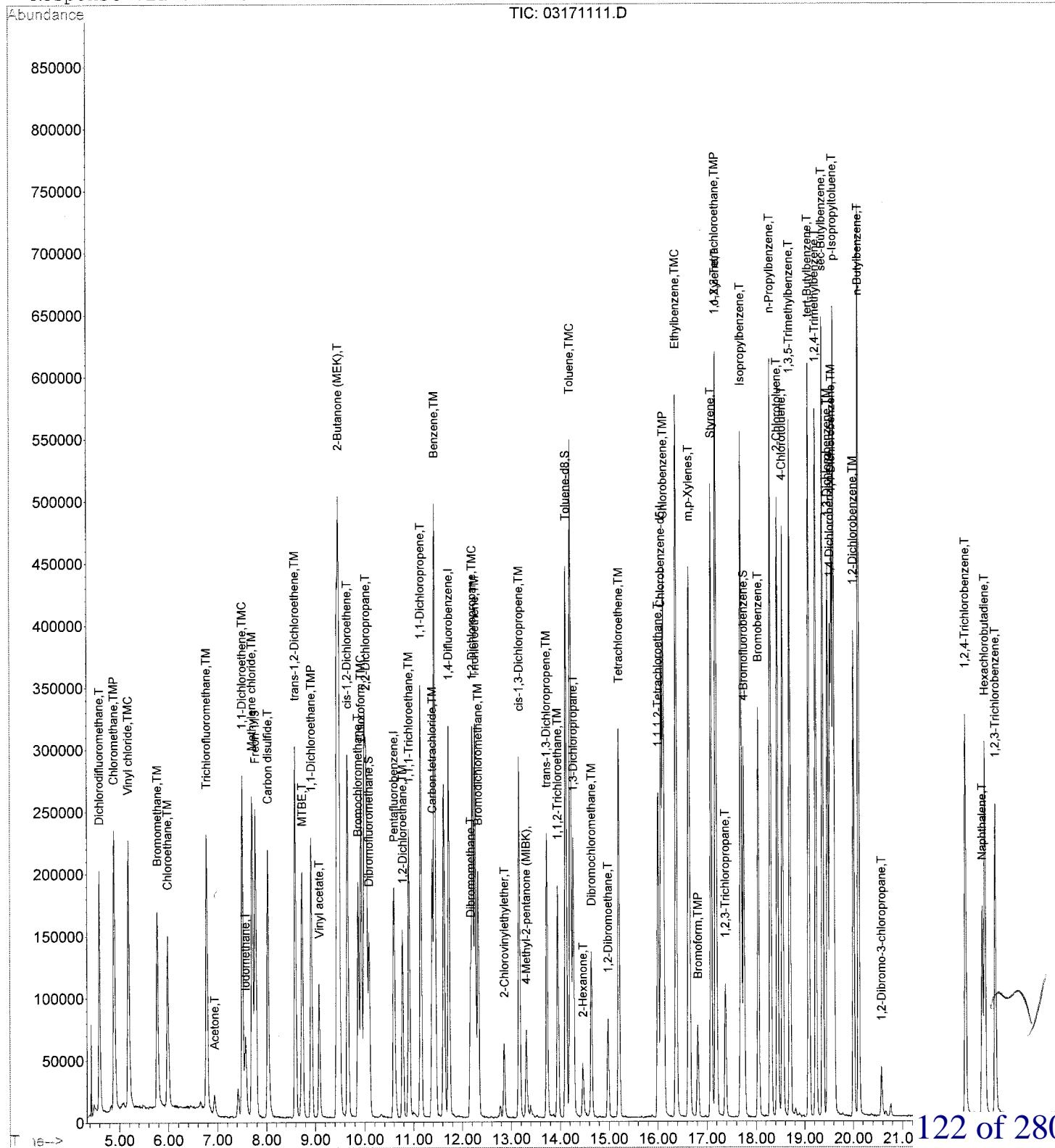
121 of 280

Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
Acq On : 17 Mar 2011 11:46 am Operator: LC  
Sample : 25 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



122 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	202044	46.49	ug/L	0.00
Spiked Amount 25.000			Recovery = 185.96%			
39) Toluene-d8	14.11	98	726789	47.56	ug/L	0.00
Spiked Amount 25.000			Recovery = 190.24%			
53) 4-Bromofluorobenzene	17.76	95	259969	47.19	ug/L	0.00
Spiked Amount 25.000			Recovery = 188.76%			
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	391099	47.93	ug/L	98
3) Chloromethane	4.90	50	687656	50.97	ug/L	99
4) Vinyl chloride	5.18	62	596978	49.70	ug/L	98
5) Bromomethane	5.78	94	296252	47.13	ug/L	98
6) Chloroethane	5.99	64	300876	47.25	ug/L	99
7) Trichlorofluoromethane	6.78	101	340516	40.77	ug/L	97
8) Acetone	6.93	43	44278	45.51	ug/L	99
9) Iodomethane	7.58	142	195341	50.45	ug/L	98
10) 1,1-Dichloroethene	7.52	96	220268	45.21	ug/L	99
11) Methylene chloride	7.71	84	264019	46.07	ug/L	99
12) Freon 113	7.78	101	262900	45.58	ug/L	99
13) Carbon disulfide	8.03	76	807912	46.61	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.15	ug/L	98
15) MTBE	8.73	73	407385	44.23	ug/L	99
16) 1,1-Dichloroethane	8.92	63	517515	46.02	ug/L	99
17) Vinyl acetate	9.08	43	400997	45.91	ug/L	99
18) 2-Butanone (MEK)	9.47	72	13656	49.70	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	257331	46.10	ug/L	99
20) Bromochloromethane	9.87	128	96376	47.18	ug/L	96
21) Chloroform	9.93	83	424654	45.77	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.51	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	46.20	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	323769	48.60	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.20	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	50.05	ug/L	100
29) Benzene	11.44	78	1008066	48.61	ug/L	98
30) Dibromomethane	12.17	93	116662	47.55	ug/L	98
31) 1,2-Dichloropropane	12.21	63	281688	48.64	ug/L	100
32) Trichloroethene	12.26	95	255144	49.21	ug/L	99
33) Bromodichloromethane	12.33	83	300337	49.34	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	50.19	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	364674	49.35	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	47.40	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.75	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	48.12	ug/L	99
40) Toluene	14.22	92	583744	49.52	ug/L	98
42) 1,3-Dichloropropane	14.27	76	277506	48.79	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031711.M Fri Mar 18 08:38:39 2011

123 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	50.92	ug/L #	94
44) Dibromochloromethane	14.65	129	168655	49.32	ug/L	98
45) 1,2-Dibromoethane	14.98	107	142279	49.83	ug/L	97
46) Tetrachloroethene	15.20	166	223148	49.50	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	48.47	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.83	ug/L	99
49) Ethylbenzene	16.38	91	1095906	49.25	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.30	ug/L	98
51) Styrene	17.10	104	602783	50.99	ug/L	99
52) o-Xylene	17.20	106	366193	48.33	ug/L	97
55) Bromoform	16.82	173	87491	52.11	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.02	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	50.24	ug/L	96
58) Isopropylbenzene	17.70	105	904235	50.93	ug/L	99
59) Bromobenzene	18.05	156	210716	51.44	ug/L	99
60) n-Propylbenzene	18.30	91	1279523	50.48	ug/L	100
61) 2-Chlorotoluene	18.45	91	736550	49.60	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.32	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.75	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	50.66	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	772492	50.09	ug/L	99
66) sec-Butylbenzene	19.38	105	1121222	50.08	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	414698	49.68	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	411367	48.95	ug/L	98
69) p-Isopropyltoluene	19.61	119	866615	50.64	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	49.55	ug/L	99
71) n-Butylbenzene	20.11	91	964633	50.65	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	49.85	ug/L	91
73) 1,2,4-Trichlorobenzene	22.28	180	240360	51.26	ug/L	99
74) Naphthalene	22.63	128	314469	50.58	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	50.29	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	192513	50.36	ug/L	99

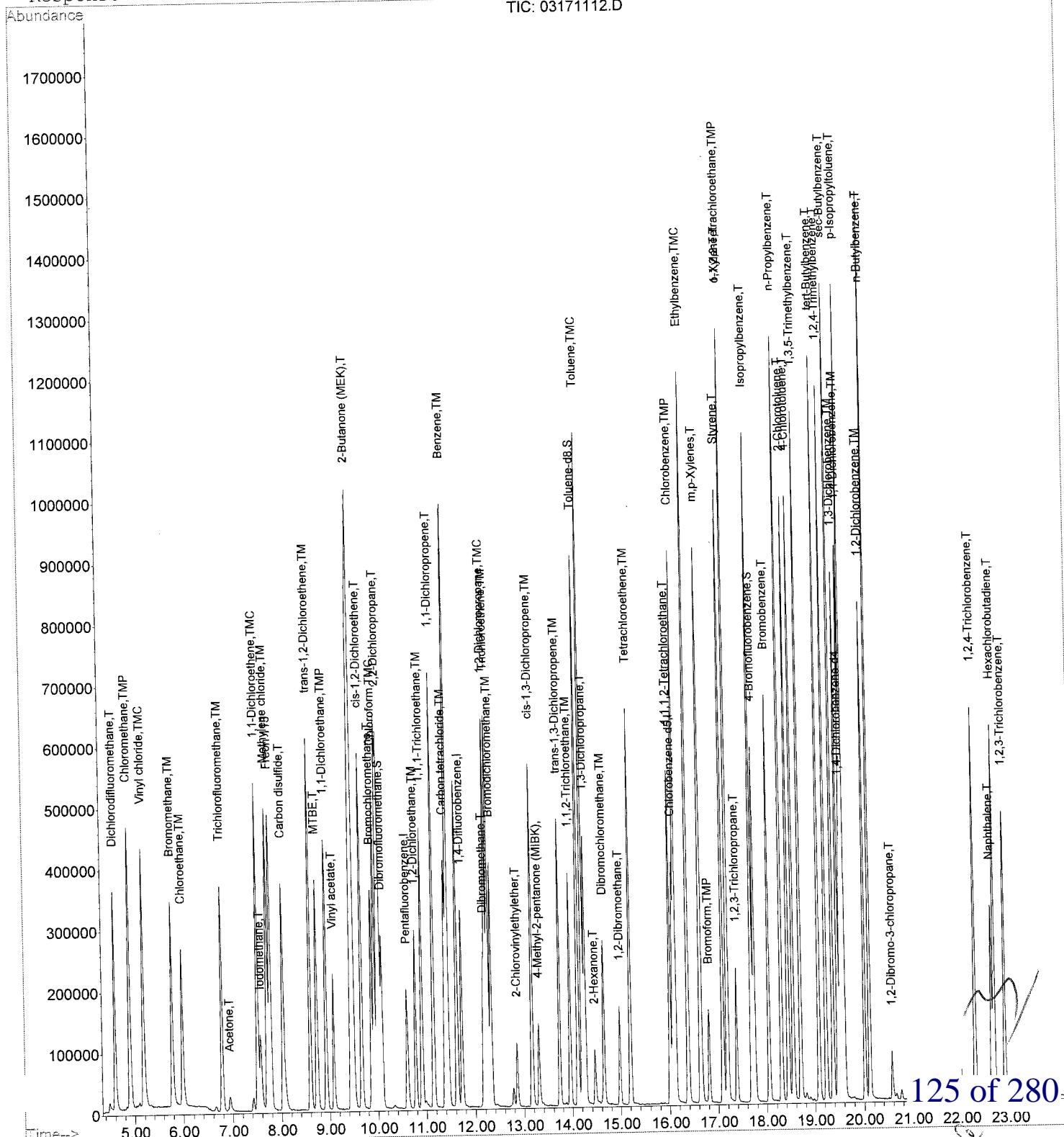
124 of 280

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171112.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

*Re-Calc*

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	425047	96.46	ug/L	0.00
Spiked Amount 25.000			Recovery	= 385.84%		
39) Toluene-d8	14.12	98	1505447	96.52	ug/L	0.00
Spiked Amount 25.000			Recovery	= 386.08%		
53) 4-Bromofluorobenzene	17.75	95	536695	97.52	ug/L	0.00
Spiked Amount 25.000			Recovery	= 390.08%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	779223	94.19	ug/L	98
3) Chloromethane	4.90	50	1431368	104.65	ug/L	99
4) Vinyl chloride	5.18	62	1228117	100.85	ug/L	100
5) Bromomethane	5.78	94	641424	100.36	ug/L	98
6) Chloroethane	5.98	64	584071	90.47	ug/L	100
7) Trichlorofluoromethane	6.78	101	698452	82.49	ug/L	98
8) Acetone	6.94	43	84316	88.94	ug/L	97
9) Iodomethane	7.58	142	393011	100.00	ug/L	99
10) 1,1-Dichloroethene	7.52	96	450680	91.25	ug/L	99
11) Methylene chloride	7.71	84	530536	91.30	ug/L	99
12) Freon 113	7.78	101	537890	91.98	ug/L	99
13) Carbon disulfide	8.04	76	1652598	94.04	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.19	ug/L	96
15) MTBE	8.74	73	859812	92.07	ug/L	99
16) 1,1-Dichloroethane	8.93	63	1054794	92.52	ug/L	99
17) Vinyl acetate	9.08	43	827230	93.42	ug/L	99
18) 2-Butanone (MEK)	9.47	72	27904	99.26	ug/L	96
19) cis-1,2-Dichloroethene	9.66	96	527963	93.29	ug/L	99
20) Bromochloromethane	9.87	128	191014	92.23	ug/L	94
21) Chloroform	9.93	83	877382	93.27	ug/L	100
22) 2,2-Dichloropropane	10.04	77	739530	96.96	ug/L	99
24) 1,2-Dichloroethane	10.78	62	540824	94.21	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	659685	97.66	ug/L	98
27) 1,1-Dichloropropene	11.15	75	764611	96.58	ug/L	98
28) Carbon tetrachloride	11.39	117	547122	100.10	ug/L	100
29) Benzene	11.44	78	2051183	96.91	ug/L	99
30) Dibromomethane	12.17	93	236182	94.32	ug/L	99
31) 1,2-Dichloropropane	12.21	63	573859	97.07	ug/L	99
32) Trichloroethene	12.27	95	518186	97.91	ug/L	100
33) Bromodichloromethane	12.33	83	619726	99.74	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	99299	94.85	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	755768	100.21	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	100.07	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	581943	99.98	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	272981	97.54	ug/L	99
40) Toluene	14.22	92	1181672	98.20	ug/L	98
42) 1,3-Dichloropropane	14.27	76	562918	99.07	ug/L	98

(#) = qualifier out of range (m) = manual integration

03171113.D 031711.M Fri Mar 18 08:38:55 2011

126 of 280

126 of 280  
Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

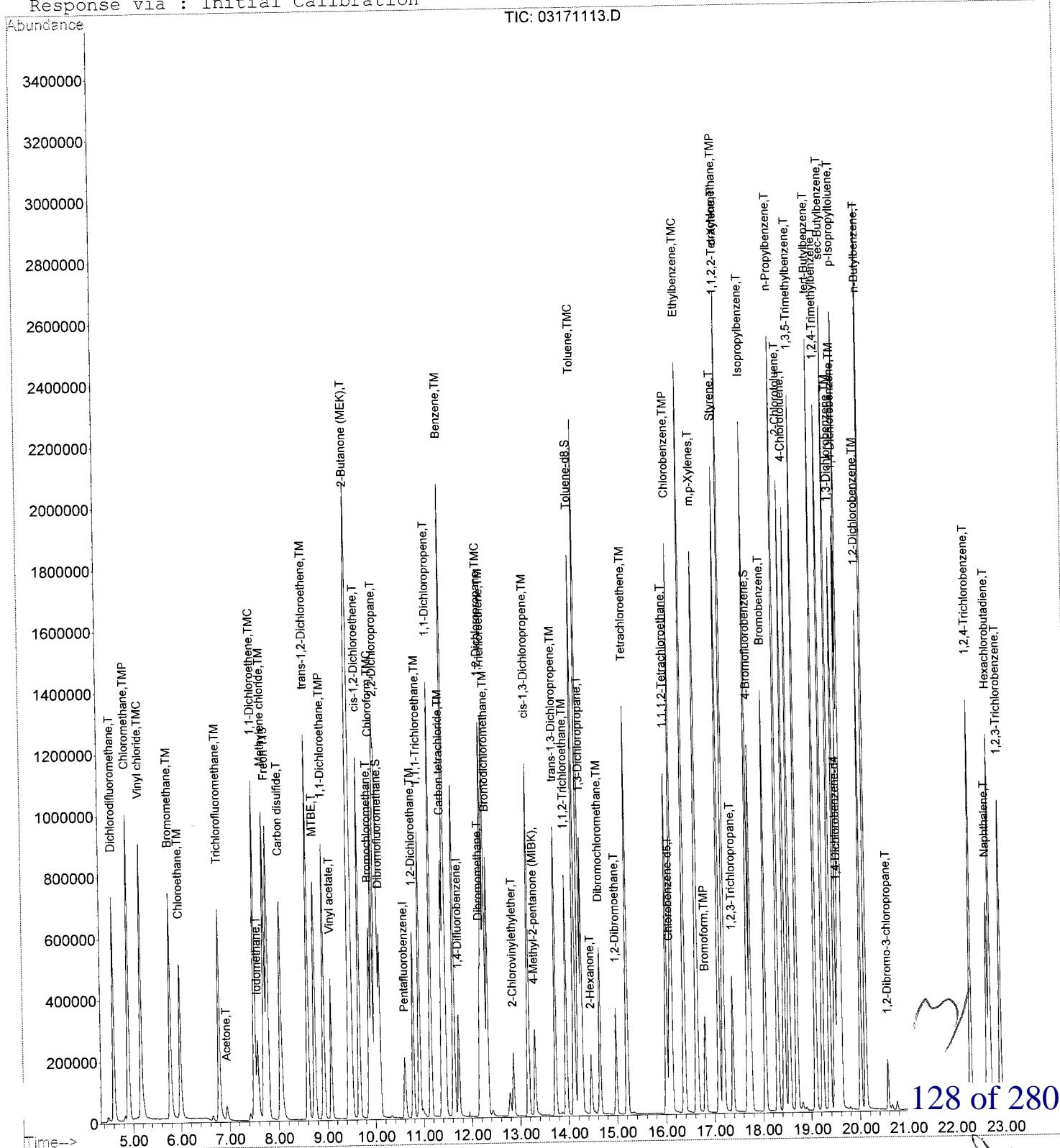
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	107.35	ug/L #	96
44) Dibromochloromethane	14.65	129	341882	100.06	ug/L	98
45) 1,2-Dibromoethane	14.98	107	294156	103.12	ug/L	99
46) Tetrachloroethene	15.20	166	455622	101.17	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	100.03	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.85	ug/L	99
49) Ethylbenzene	16.38	91	2245318	100.99	ug/L	100
50) m,p-Xylenes	16.64	106	773283	99.30	ug/L	100
51) Styrene	17.10	104	1244691	105.39	ug/L	99
52) o-Xylene	17.20	106	750628	99.16	ug/L	97
55) Bromoform	16.82	173	182147	105.27	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.52	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	75618	99.33	ug/L	96
58) Isopropylbenzene	17.70	105	1844526	100.80	ug/L	100
59) Bromobenzene	18.05	156	429425	101.72	ug/L	99
60) n-Propylbenzene	18.30	91	2615929	100.14	ug/L	100
61) 2-Chlorotoluene	18.45	91	1500663	98.05	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.39	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	100.18	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	99.86	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	99.31	ug/L	99
66) sec-Butylbenzene	19.39	105	2280043	98.81	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	98.46	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.78	ug/L	98
69) p-Isopropyltoluene	19.61	119	1785874	101.26	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	97.71	ug/L	100
71) n-Butylbenzene	20.12	91	1981760	100.96	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	98.40	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	510699	105.68	ug/L	99
74) Naphthalene	22.63	128	678287	105.85	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	102.46	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	412634	104.74	ug/L	100

M  
127 of 280

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
Acq On : 17 Mar 2011 12:48 pm Operator: LC  
Sample : 100 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



128 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:39 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	839626	186.83	ug/L	0.00
Spiked Amount 25.000			Recovery =	747.32%		
39) Toluene-d8	14.12	98	3013932	192.60	ug/L	0.00
Spiked Amount 25.000			Recovery =	770.40%		
53) 4-Bromofluorobenzene	17.76	95	1038923	185.85	ug/L	0.00
Spiked Amount 25.000			Recovery =	743.40%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	1487523	176.30	ug/L	98
3) Chloromethane	4.90	50	2913054	208.82	ug/L	99
4) Vinyl chloride	5.16	62	2428967	195.57	ug/L	100
5) Bromomethane	5.78	94	1343422	205.83	ug/L	97
6) Chloroethane	5.98	64	1199344	182.14	ug/L	100
7) Trichlorofluoromethane	6.79	101	1701514	197.03	ug/L	99
8) Acetone	6.94	43	201529	213.75	ug/L	98
9) Iodomethane	7.58	142	794173	198.00	ug/L	98
10) 1,1-Dichloroethene	7.52	96	920511	182.74	ug/L	98
11) Methylene chloride	7.71	84	1063508	179.46	ug/L	97
12) Freon 113	7.78	101	1079115	180.94	ug/L	98
13) Carbon disulfide	8.03	76	3312605	184.83	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	185.90	ug/L	97
15) MTBE	8.74	73	1719756	180.56	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	181.08	ug/L	99
17) Vinyl acetate	9.08	43	1660788	183.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	57153	198.44	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	1073476	185.99	ug/L	98
20) Bromochloromethane	9.88	128	361702	171.24	ug/L	95
21) Chloroform	9.93	83	1746080	182.00	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	186.19	ug/L	98
24) 1,2-Dichloroethane	10.78	62	1056987	180.53	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	1325051	192.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	1539559	193.84	ug/L	99
28) Carbon tetrachloride	11.39	117	1092097	199.16	ug/L	100
29) Benzene	11.45	78	4061777	191.29	ug/L	99
30) Dibromomethane	12.17	93	461244	183.60	ug/L	98
31) 1,2-Dichloropropane	12.21	63	1126863	190.00	ug/L	100
32) Trichloroethene	12.27	95	1022222	192.52	ug/L	98
33) Bromodichloromethane	12.33	83	1217593	195.34	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	174106	166.89	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	197.58	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	195.44	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.66	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	536251	191.00	ug/L	100
40) Toluene	14.22	92	2368495	196.20	ug/L	98
42) 1,3-Dichloropropane	14.28	76	1107954	191.97	ug/L	98

(#) = qualifier out of range (m) = manual integration

03171114.D 031711.M Fri Mar 18 08:39:11 2011

129 of 280

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	206.17	ug/L	# 96
44) Dibromochloromethane	14.65	129	686033	197.67	ug/L	99
45) 1,2-Dibromoethane	14.99	107	575405	198.59	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.85	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	200.14	ug/L	96
48) Chlorobenzene	16.13	112	2393108	199.64	ug/L	97
49) Ethylbenzene	16.38	91	4465000	197.71	ug/L	99
50) m,p-Xylenes	16.64	106	1550944	196.07	ug/L	99
51) Styrene	17.10	104	2561762	213.54	ug/L	98
52) o-Xylene	17.20	106	1517247	197.33	ug/L	97
55) Bromoform	16.82	173	364089	184.76	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.71	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	155202	179.01	ug/L	97
58) Isopropylbenzene	17.70	105	3655213	175.39	ug/L	99
59) Bromobenzene	18.05	156	865850	180.09	ug/L	98
60) n-Propylbenzene	18.31	91	5305462	178.33	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	179.50	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.40	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	193.53	ug/L	98
64) tert-Butylbenzene	19.09	119	2997423	195.51	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	189.77	ug/L	98
66) sec-Butylbenzene	19.39	105	5038432	191.73	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	1885851	192.49	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.90	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	200.23	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	193.10	ug/L	98
71) n-Butylbenzene	20.12	91	4374192	195.66	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	192.76	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	201.28	ug/L	98
74) Naphthalene	22.63	128	1413680	193.70	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	195.85	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	830638	185.13	ug/L	99



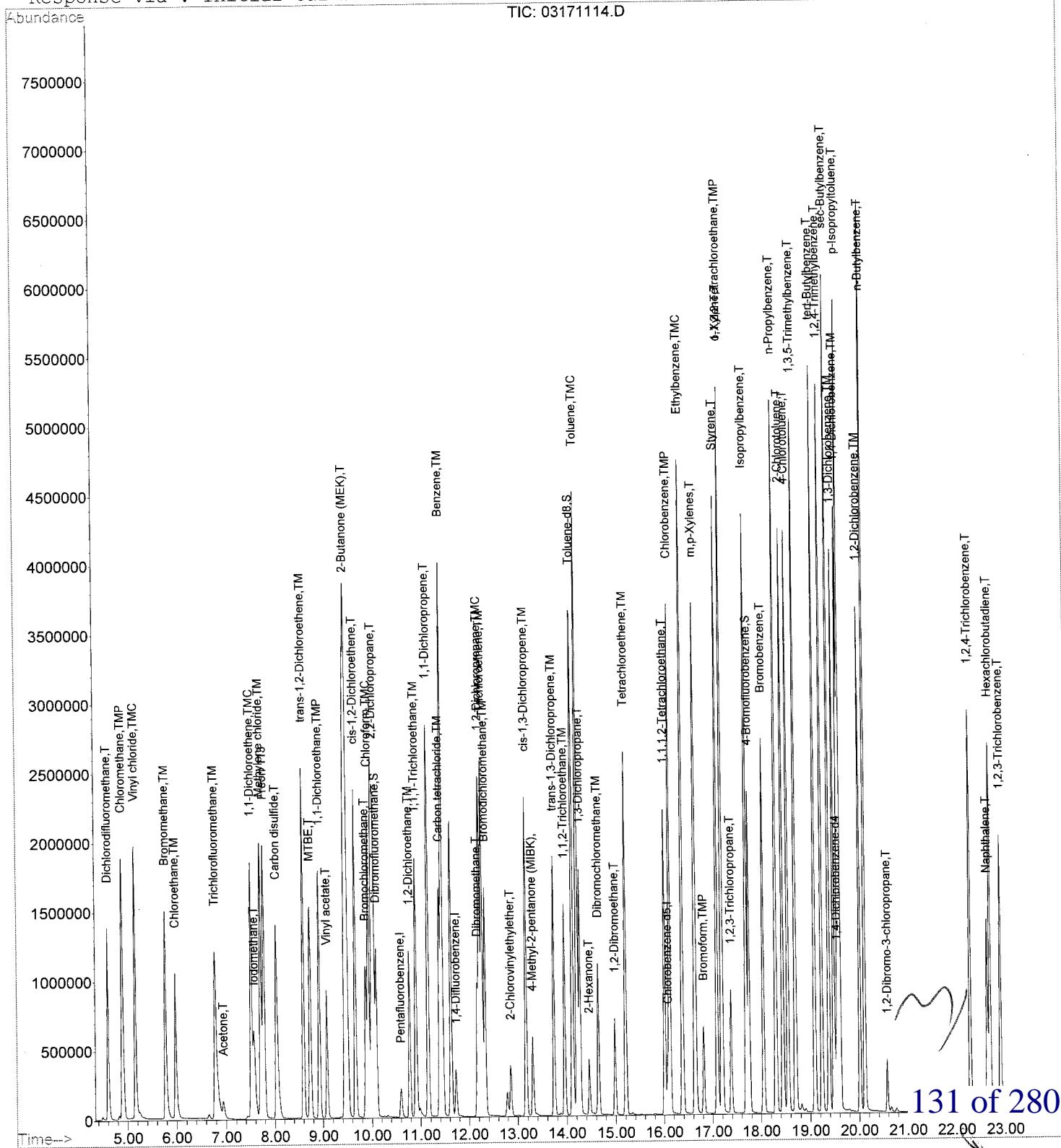
130 of 280



## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
Acq On : 17 Mar 2011 1:19 pm Operator: LC  
Sample : 200 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL DATA**

METHOD: 8260B

DATE: 03/18/2011

WORK ORDER: PUC0829

11C0694

Phoenix

SOP No. PE-VOA-001, Rev. 1  
Effective Date: 03/11/2010  
Page No.: 1 of 1

**ANALYTICAL DATA REVIEW CHECKLIST**

SOP PE-VOA-001 R.1

GC/MS Volatile Organic Analysis [ Method No. EPA 624 & 8260B ]

Analysis Date:	03/18/11	Analyst:	lc	
Description		Yes	No	NA <sup>1</sup>
1.	BFB (50 ng or less): Verify meets criteria every 12 hours	/	/	/
2.	Initial Calibration Curve (5 levels)	/	/	/
-	Date of Initial Calibration: 03/11/11.m	/	/	/
-	SPCCs must meet Min. RF	/	/	/
-	CCCs ≤ 30% RPD	/	/	/
-	All other compounds ≤ 15% RSD or use curve	/	/	/
-	Comments:	/	/	/
-	Second source within historical limits	/	/	/
3.	Continuing Calibration Check (every 12 hours)	/	/	/
-	SPCCs must meet Min. RF	/	/	/
-	CCCs ≤ 20% D	/	/	/
-	IS RT ± 30 secs	/	/	/
-	IS area -50% to +100%	/	/	/
-	All CCVs for reported analytes within historical limits	/	/	/
4.	Method Blank	/	/	/
-	Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/	/	/
-	All compounds of interest must be < Reporting Limit	/	/	/
5.	Laboratory Control Samples (LCS/LCSD)	/	/	/
-	Must be analyzed per 20 samples/per matrix/per batch	/	/	/
-	LCS/LCSD recoveries within historical limits	/	/	/
-	RPD ≤ 25%	/	/	/
-	Surrogates within historical limits	/	/	/
6.	MS/MSD	/	/	/
-	Must be analyzed per 20 samples/per matrix/per batch	/	/	/
-	MS/MSD recoveries within historical limits	/	/	/
-	RPD ≤ 25%	/	/	/
-	Surrogates within historical limits	/	/	/
7.	Samples	/	/	/
-	Analyzed within 14 days of sampling	/	/	/
-	IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL or CCV	/	/	/
-	Surrogate recoveries within historical limits	/	/	/
-	pH ≤ 2	/	/	/
-	If pH is not ≤ 2, flag data with P and pH Data Qualifier	/	/	/
Comments:				
(1) Trichlorofluoromethane 27				
(2) 1,1-dichloroethane 17				
(3) 1,1-DCE, Methylene chloride 122				

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: <i>Leigh Clark</i>	Date: 03/21/11
	Reviewer: <i>Alysha</i>	Date: 3/21/11

<sup>1</sup>) NA: Not Applicable

TestAmerica

## Phoenix

**DATE:** 03/18/11

ANALYST: CC

## **GC/MS 7 DAILY LOG SUMMARY**

QC BATCH # (s) :

## SEQUENCE FILE:

Air

18693

H<sub>2</sub>O

11C0694

**CALIBRATION METHOD(S):** 031711.M

CALIBRATION METHOD(S):		SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
POS #	FILENAME						
8	03181101	Blank	1x10mL	N/A	8260B	H <sub>2</sub> O	DNA-Clean Out
1	02	Tune	2mL				
9	03	25 PPB CCV	1x10mL				
10	04	20 PPB CCV					
12	05	11C0693/ 11C0694 -BSI					
13	06	1 -BSI					
16	07	1 -BLK1					
1	08	PUC0904-05A (TB)		≤2			PCP
2	09	1 0982-05A		≤2			Source
3	10	1 0827-02A		≤2			
4	11	11C0693 -MSI		≤2			
5	12	1 -MSI		≤2			
6	13	PUC1236-01A	20x 0.5mL	N/A		Air	Source D ③ 1220 D ③ 1223
7	14	DNA -DUPI	1x 10mL				③ 1225
8	15	PUC1236-02A	1x 10mL				Source ③ 1435
9	16	1 -01A		10/4		Air	③ 1438
10	17	11C0693 -DUPI					
12	18	PUC0827-01A	1x10mL	≤2		H <sub>2</sub> O	
13	19	1 -03A		≤2			
14	20	1 -04A		≤2			
13	21	0829-01A		≤2			Possible carryover in order
16	22	0730-01B REI		≤2			
1	23	0904-04A		≤2			PCP
2	24	1205-01D	10x 1mL	pH=7			
3	25	1116-01E REI	200x 50μL	pH=7			Acetone 122 @ 1000x Acc
4	26	1079-02A (TB)	1x10mL	≤2	624		
5	27	1108-15A		≤2			
8	28	1079-01C		≤2			

## **STANDARD ID NUMBERS**

CCV/H2O | CCS/H2O SPIKE: P401S37

CALIBRATION STD: 1 1505

Internal Std: 1500

IS/Surrogate/BFB: 1534 PUCP61

LOT #: 111

#### **REQUIRED REVIEWS**

## ARCHON REVIEWED

**By / Date:** 03/18/11

## **SEQUENCE REVIEWED**

By / Date: CC 03/8/11

FINAL REVIEWER / Date:

© 03/18/11

LC 03/18/11  
SL 3/21/11

134 of 280

134 of 280  
Page 38 of 100

# Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\031811

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	8	03181101.d	1.	BLANK		18 Mar 2011 07:39
2	1	03181102.d	1.	TUNE		18 Mar 2011 08:07
3	9	03181103.d	1.	25 PPB CCV		18 Mar 2011 08:26
4	10	03181104.d	1.	20 PPB CCV		18 Mar 2011 08:57
5	12	03181105.d	1.	-BS1		18 Mar 2011 09:28
6	13	03181106.d	1.	-BSD1		18 Mar 2011 09:58
7	16	03181107.d	1.	-BLK1		18 Mar 2011 10:29
8	1	03181108.d	1.	PUC0904-05	TB	18 Mar 2011 11:00
9	2	03181109.d	1.	PUC0982-05	TB	18 Mar 2011 11:30
10	3	03181110.d	1.	PUC0827-02	SOURCE	18 Mar 2011 12:01
11	4	03181111.d	1.	-MS1		18 Mar 2011 12:32
12	5	03181112.d	1.	-MSD1		18 Mar 2011 13:03
13	6	03181113.d	1.	PUC1236-01	20X	18 Mar 2011 13:33
14	7	03181114.d	1.	-DUP1	20X	18 Mar 2011 14:04
15	8	03181115.d	1.	PUC1236-02		18 Mar 2011 14:35
16	6	03181116.d	1.	PUC1236-01		18 Mar 2011 15:06
17	7	03181117.d	1.	-DUP1		18 Mar 2011 15:37
18	9	03181118.d	1.	PUC0827-01		18 Mar 2011 16:07
19	10	03181119.d	1.	PUC0827-03		18 Mar 2011 16:38
20	12	03181120.d	1.	PUC0827-04		18 Mar 2011 17:09
21	13	03181121.d	1.	PUC0829-01		18 Mar 2011 17:40
22	16	03181122.d	1.	PUC0730-01RE1		18 Mar 2011 18:11
23	1	03181123.d	1.	PUC0904-04		18 Mar 2011 18:42
24	2	03181124.d	1.	PUC1205-01		18 Mar 2011 19:12
25	3	03181125.d	1.	PUC1116-01RE1		18 Mar 2011 19:43
26	4	03181126.d	1.	PUC1079-02	10X	18 Mar 2011 20:14
27	5	03181127.d	1.	PUC1108-15	200X	18 Mar 2011 20:45
28	8	03181128.d	1.	PUC1079-01	TB	18 Mar 2011 21:15

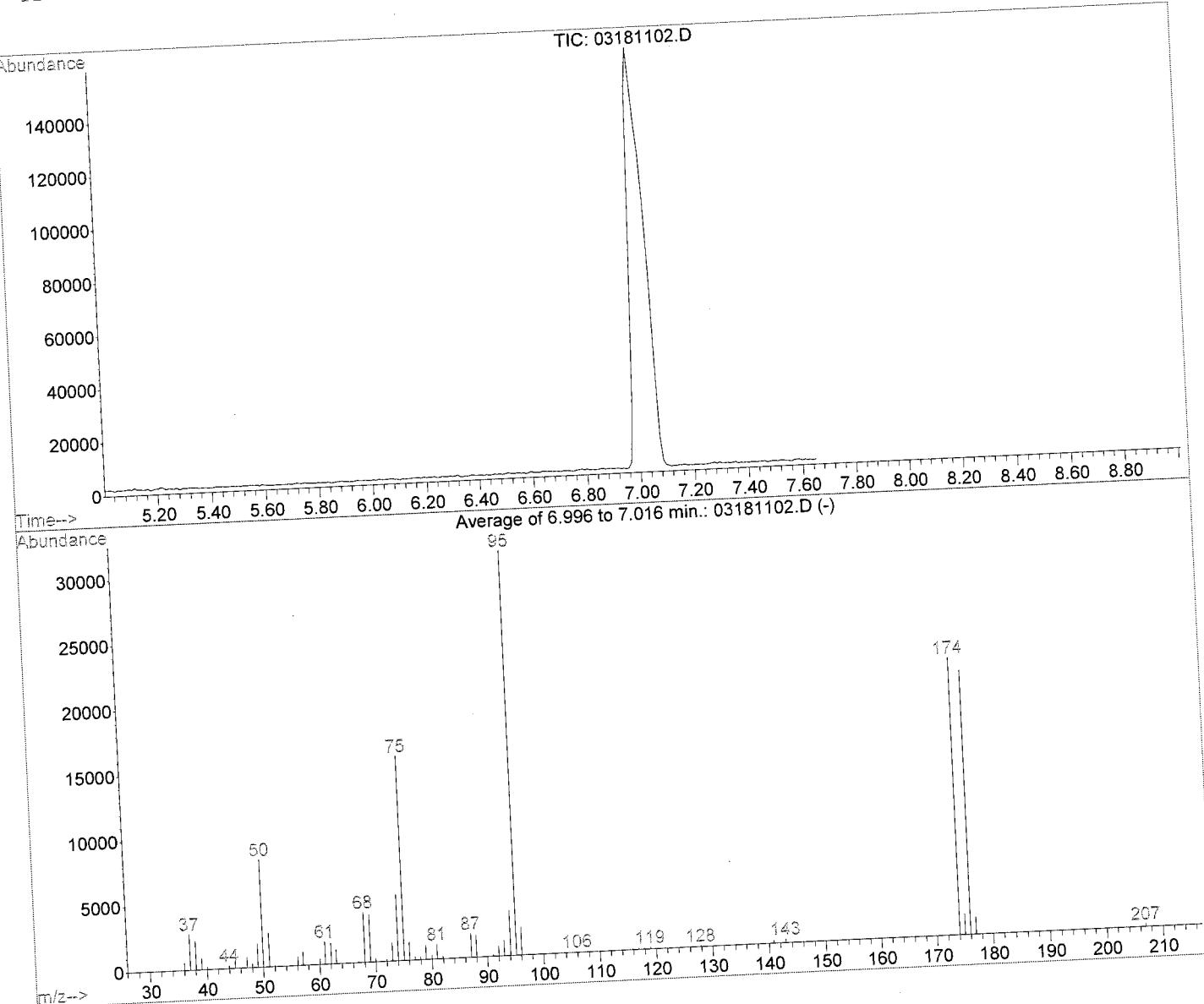
✓ 3/21/11 2

Leospell

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181102.D      Vial: 1  
 Acq On : 18 Mar 2011 8:07 am      Operator: LC  
 Sample : TUNE      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

13/21/11



Spectrum Information: Average of 6.996 to 7.016 min.

Target Mass	Rel. to 95	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.5	8199	PASS
75	95	30	60	50.5	15631	PASS
95	95	100	100	100.0	30971	PASS
96	95	5	9	6.7	2089	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.5	21208	PASS
175	174	5	9	7.3	1545	PASS
176	174	95	101	95.2	20200	PASS
177	176	5	9	6.4	1295	PASS

## NEW8260-CCV

Data File Name 03181103.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\031811\  
 Operator LC  
 Date Acquired 3/18/2011 8:26  
 Acq. Method File 8260B  
 Sample Name 25 PPB CCV  
 Instrument Name GCMS7

Name	Amount	Spike Amount	% REC	Low	High	T/F
				Low	High	T/F
Dichlorodifluoromethane	23.27	25.00	93.09	60	150	TRUE
Chloromethane	25.59	25.00	102.37	60	140	TRUE
Vinyl chloride	24.62	25.00	98.47	80	120	TRUE CCC
Bromomethane	21.53	25.00	86.12	70	140	TRUE
Chloroethane	24.47	25.00	97.87	70	130	TRUE
Trichlorofluoromethane	23.49	25.00	93.95	70	150	TRUE
Acetone	27.89	25.00	111.56	10	150	TRUE
Iodomethane	24.06	25.00	96.23	70	140	TRUE CCC
1,1-Dichloroethene	22.74	25.00	90.96	80	120	TRUE
Methylene chloride	22.89	25.00	91.58	70	120	TRUE
Freon 113	23.01	25.00	92.02	60	140	TRUE
Carbon disulfide	23.23	25.00	92.91	70	130	TRUE
trans-1,2-Dichloroethene	23.40	25.00	93.60	80	120	TRUE
MTBE	23.54	25.00	94.17	70	130	TRUE
1,1-Dichloroethane	23.24	25.00	92.94	70	125	TRUE
Vinyl acetate	23.06	25.00	92.24	40	150	TRUE
2-Butanone (MEK)	26.67	25.00	106.68	40	150	TRUE
cis-1,2-Dichloroethene	23.15	25.00	92.60	80	120	TRUE
Bromochloromethane	23.31	25.00	93.22	80	120	TRUE CCC
Chloroform	23.43	25.00	93.71	80	130	TRUE
2,2-Dichloropropane	24.95	25.00	99.80	80	120	TRUE
Dibromofluoromethane	23.51	25.00	94.06	80	120	TRUE
1,2-Dichloroethane	23.56	25.00	94.24	75	130	TRUE
1,1,1-Trichloroethane	24.05	25.00	96.21	80	120	TRUE
1,1-Dichloropropene	24.08	25.00	96.30	80	130	TRUE
Carbon tetrachloride	24.15	25.00	96.59	80	130	TRUE
Benzene	23.45	25.00	93.80	80	120	TRUE
Dibromomethane	23.37	25.00	93.48	80	120	TRUE CCC
1,2-Dichloropropane	23.69	25.00	94.75	80	120	TRUE
Trichloroethene	23.97	25.00	95.86	80	120	TRUE
Bromodichloromethane	24.56	25.00	98.25	80	120	TRUE
2-Chlorovinylethylether	26.44	25.00	105.77	70	135	TRUE
cis-1,3-Dichloropropene	24.45	25.00	97.78	80	120	TRUE
4-Methyl-2-pentanone (MIB)	23.65	25.00	94.58	60	130	TRUE
trans-1,3-Dichloropropene	24.28	25.00	97.13	80	125	TRUE

1,1,2-Trichloroethane	23.01	25.00	92.02	80	120	TRUE
Toluene-d8	<b>22.71</b>	<b>25.00</b>	<b>90.83</b>	<b>80</b>	<b>120</b>	TRUE CCC
Toluene	23.59	25.00	94.37	80	120	TRUE
1,3-Dichloropropane	23.40	25.00	93.58	80	120	TRUE
2-Hexanone	25.28	25.00	101.12	20	150	TRUE
Dibromochloromethane	23.65	25.00	94.17	80	120	TRUE
1,2-Dibromoethane	23.54	25.00	96.84	70	130	TRUE
Tetrachloroethene	24.21	25.00	94.96	80	120	TRUE
1,1,1,2-Tetrachloroethane	23.74	25.00	94.05	80	120	TRUE
Chlorobenzene	23.51	25.00	94.97	80	120	TRUE CCC
Ethylbenzene	23.74	25.00	94.67	60	140	TRUE
m,p-Xylenes	23.67	25.00	99.16	80	120	TRUE
Styrene	24.79	25.00	93.96	80	120	TRUE
o-Xylene	23.49	25.00	<b>92.37</b>	<b>80</b>	<b>120</b>	TRUE
<b>4-Bromofluorobenzene</b>	<b>23.09</b>	<b>25.00</b>	95.83	80	120	TRUE
Bromoform	23.96	25.00	93.74	80	120	TRUE
1,1,2,2-Tetrachloroethane	23.44	25.00	98.39	70	130	TRUE
1,2,3-Trichloropropane	24.60	25.00	98.54	80	130	TRUE
Isopropylbenzene	24.64	25.00	96.35	80	120	TRUE
Bromobenzene	24.09	25.00	96.26	75	130	TRUE
n-Propylbenzene	24.06	25.00	94.70	80	120	TRUE
2-Chlorotoluene	23.68	25.00	96.08	80	120	TRUE
4-Chlorotoluene	24.02	25.00	98.77	80	130	TRUE
1,3,5-Trimethylbenzene	24.69	25.00	96.59	80	120	TRUE
tert-Butylbenzene	24.15	25.00	95.77	80	120	TRUE
1,2,4-Trimethylbenzene	23.94	25.00	95.32	80	125	TRUE
sec-Butylbenzene	23.83	25.00	95.34	80	120	TRUE
1,3-Dichlorobenzene	23.84	25.00	94.76	80	120	TRUE
1,4-Dichlorobenzene	23.69	25.00	97.79	80	130	TRUE
p-Isopropyltoluene	24.45	25.00	92.64	80	120	TRUE
1,2-Dichlorobenzene	23.16	25.00	97.48	80	130	TRUE
n-Butylbenzene	24.37	25.00	93.88	50	150	TRUE
1,2-Dibromo-3-chloropropane	23.47	25.00	97.20	50	150	TRUE
1,2,4-Trichlorobenzene	24.30	25.00	90.68	40	150	TRUE
Naphthalene	22.67	25.00	100.34	40	150	TRUE
Hexachlorobutadiene	25.09	25.00	97.97	60	140	TRUE
1,2,3-Trichlorobenzene	24.49					

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:03 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

3/21/11 e

Quant Results File: 031711.RES

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163018	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	288350	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	234811	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	108888	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	96456	23.51	ug/L	0.00
Spiked Amount 25.000			Recovery	=	94.04%	
39) Toluene-d8	14.11	98	330236	22.71	ug/L	0.00
Spiked Amount 25.000			Recovery	=	90.84%	
53) 4-Bromofluorobenzene	17.74	95	118842	23.09	ug/L	0.00
Spiked Amount 25.000			Recovery	=	92.36%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	179237	23.27	ug/L	97
3) Chloromethane	4.90	50	325877	25.59	ug/L	98
4) Vinyl chloride	5.18	62	279081	24.62	ug/L	99
5) Bromomethane	5.77	94	126891	21.53	ug/L	96
6) Chloroethane	5.98	64	147050	24.47	ug/L	99
7) Trichlorofluoromethane	6.78	101	185141	23.49	ug/L	100
8) Acetone	6.92	43	26901	27.89	ug/L	99
9) Iodomethane	7.57	142	87668	24.06	ug/L	98
10) 1,1-Dichloroethene	7.51	96	104551	22.74	ug/L	99
11) Methylene chloride	7.71	84	123842	22.89	ug/L	99
12) Freon 113	7.77	101	125234	23.01	ug/L	99
13) Carbon disulfide	8.02	76	379972	23.23	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	119037	23.40	ug/L	99
15) MTBE	8.73	73	204673	23.54	ug/L	100
16) 1,1-Dichloroethane	8.92	63	246596	23.24	ug/L	99
17) Vinyl acetate	9.08	43	190087	23.06	ug/L	100
18) 2-Butanone (MEK)	9.47	72	6808	26.67	ug/L	83
19) cis-1,2-Dichloroethene	9.66	96	121956	23.15	ug/L	99
20) Bromochloromethane	9.87	128	44931	23.31	ug/L	96
21) Chloroform	9.92	83	205152	23.43	ug/L	100
22) 2,2-Dichloropropane	10.03	77	177134	24.95	ug/L	99
24) 1,2-Dichloroethane	10.77	62	125911	23.56	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	151238	24.05	ug/L	99
27) 1,1-Dichloropropene	11.15	75	177713	24.08	ug/L	99
28) Carbon tetrachloride	11.38	117	123065	24.15	ug/L	98
29) Benzene	11.43	78	462743	23.45	ug/L	98
30) Dibromomethane	12.16	93	54563	23.37	ug/L	99
31) 1,2-Dichloropropane	12.20	63	130555	23.69	ug/L	99
32) Trichloroethene	12.26	95	118263	23.97	ug/L	100
33) Bromodichloromethane	12.32	83	142290	24.56	ug/L	99
34) 2-Chlorovinylethylether	12.85	63	26853	26.44	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	171902	24.45	ug/L	98
36) 4-Methyl-2-pantanone (MIBK)	13.30	43	68113	23.65	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	131779	24.28	ug/L	98
38) 1,1,2-Trichloroethane	13.94	83	60029	23.01	ug/L	98
40) Toluene	14.20	92	264705	23.59	ug/L	98
42) 1,3-Dichloropropane	14.26	76	124306	23.40	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03181103.D 031711.M Fri Mar 18 12:03:56 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:03 2011  
 Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	44787	25.28	ug/L	# 95
44) Dibromochloromethane	14.64	129	75574	23.65	ug/L	99
45) 1,2-Dibromoethane	14.97	107	62801	23.54	ug/L	96
46) Tetrachloroethene	15.20	166	101959	24.21	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.00	131	82557	23.74	ug/L	97
48) Chlorobenzene	16.11	112	259478	23.51	ug/L	99
49) Ethylbenzene	16.38	91	493621	23.74	ug/L	100
50) m,p-Xylenes	16.63	106	172346	23.67	ug/L	98
51) Styrene	17.09	104	273768	24.79	ug/L	98
52) o-Xylene	17.19	106	166268	23.49	ug/L	96
55) Bromoform	16.81	173	37773	23.96	ug/L	94
56) 1,1,2,2-Tetrachloroethane	17.18	83	74718	23.44	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	17062	24.60	ug/L	97
58) Isopropylbenzene	17.69	105	410764	24.64	ug/L	100
59) Bromobenzene	18.04	156	92660	24.09	ug/L	98
60) n-Propylbenzene	18.29	91	572801	24.06	ug/L	100
61) 2-Chlorotoluene	18.44	91	330154	23.68	ug/L	99
62) 4-Chlorotoluene	18.55	91	332051	24.02	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	355783	24.69	ug/L	99
64) tert-Butylbenzene	19.09	119	296214	24.15	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	346750	23.94	ug/L	98
66) sec-Butylbenzene	19.37	105	501006	23.83	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	186834	23.84	ug/L	98
68) 1,4-Dichlorobenzene	19.56	146	186953	23.69	ug/L	99
69) p-Isopropyltoluene	19.60	119	392872	24.45	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	157901	23.16	ug/L	98
71) n-Butylbenzene	20.11	91	435904	24.37	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	9972	23.47	ug/L	89
73) 1,2,4-Trichlorobenzene	22.28	180	107001	24.30	ug/L	99
74) Naphthalene	22.62	128	132378	22.67	ug/L	100
75) Hexachlorobutadiene	22.68	225	70543	25.09	ug/L	97
76) 1,2,3-Trichlorobenzene	22.89	180	87921	24.49	ug/L	98

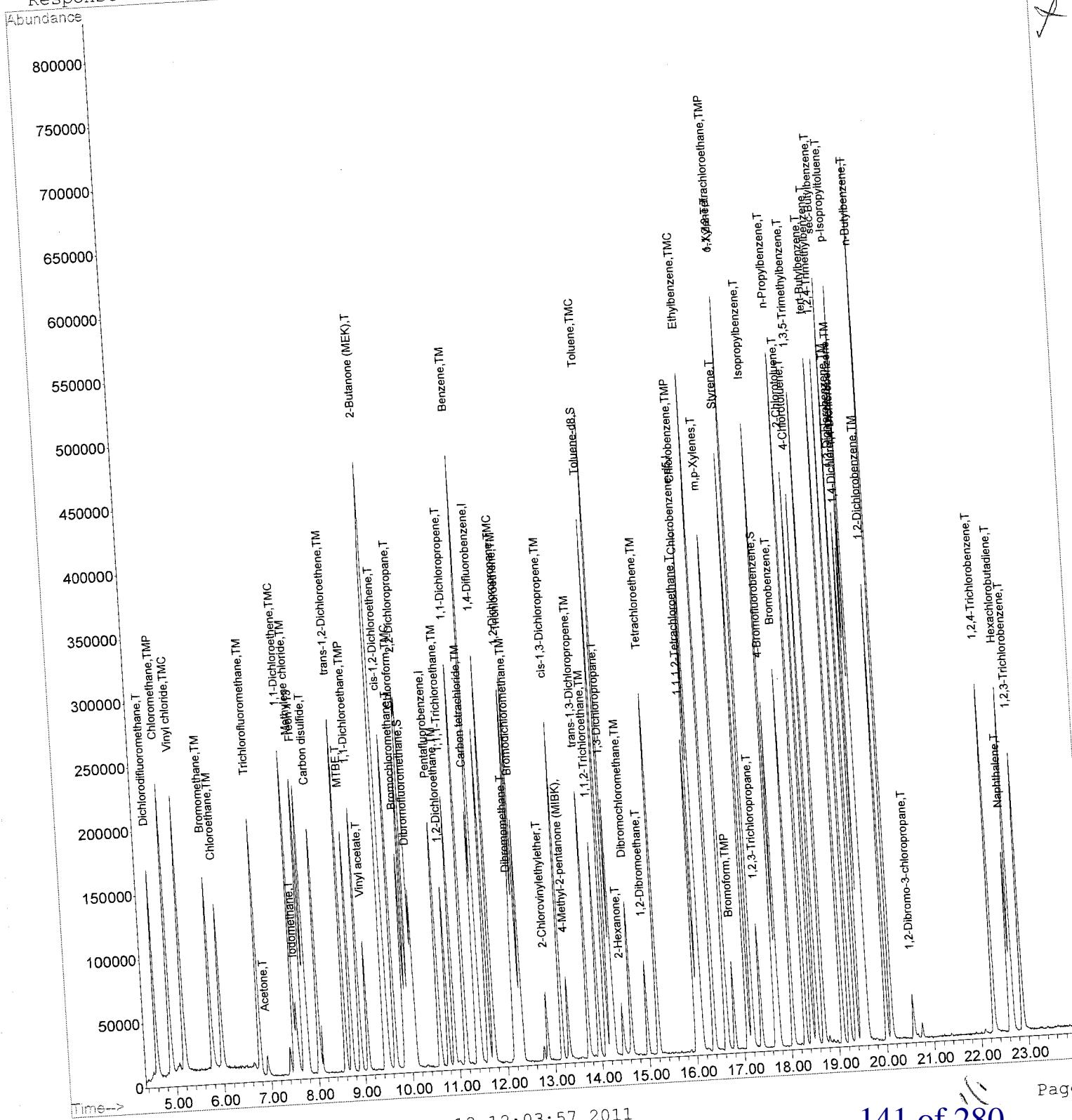
(#) = qualifier out of range (m) = manual integration  
 03181103.D 031711.M Fri Mar 18 12:03:56 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D      Vial: 9  
 Acq On : 18 Mar 2011 8:26 am      Operator: LC  
 Sample : 25 PPB CCV      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:03 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:03 2011      Response via: Initial Calibration

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03181103.D



03181103.D 031711.M

Fri Mar 18 12:03:57 2011

141 of 280

Page

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

✓ 3/21/11

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2 T	Dichlorodifluoromethane	1.181	1.099	6.9	90	0.00
3 TMP	Chloromethane	1.953	1.999	-2.4	101	0.00
4 TMC	Vinyl chloride	1.739	1.712	1.6	98	0.00
5 TM	Bromomethane	0.813	0.778	4.3	90	0.00
6 TM	Chloroethane	0.922	0.902	2.2	98	0.00
7 TM	Trichlorofluoromethane	1.209	1.136	6.0	86	0.00
8 T	Acetone	0.194	0.165	14.9	104	-0.02
9 T	Iodomethane	0.531	0.538	-1.3	89	0.00
10 TMC	1,1-Dichloroethene	0.705	0.641	9.1	94	0.00
11 TM	Methylene chloride	0.830	0.760	8.4	94	0.00
12	Freon 113	0.835	0.768	8.0	94	0.00
13 T	Carbon disulfide	2.509	2.331	7.1	95	0.00
14 TM	trans-1,2-Dichloroethene	0.780	0.730	6.4	94	0.00
15 T	MTBE	1.333	1.256	5.8	95	0.00
16 TMP	1,1-Dichloroethane	1.628	1.513	7.1	93	0.00
17 T	Vinyl acetate	1.264	1.166	7.8	94	0.00
18 T	2-Butanone (MEK)	0.036	0.042#	-16.7	99	0.00
19 T	cis-1,2-Dichloroethene	0.808	0.748	7.4	93	0.00
20 T	Bromochloromethane	0.296	0.276	6.8	95	0.00
21 TMC	Chloroform	1.343	1.258	6.3	94	0.00
22 T	2,2-Dichloropropane	1.089	1.087	0.2	98	0.00
23 S	Dibromofluoromethane	0.629	0.592	5.9	93	0.00
24 TM	1,2-Dichloroethane	0.820	0.772	5.9	92	0.00
25 TM	1,1,1-Trichloroethane	0.964	0.928	3.7	93	0.00
26 I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
27 T	1,1-Dichloropropene	0.640	0.616	3.8	93	0.00
28 TM	Carbon tetrachloride	0.442	0.427	3.4	92	0.00
29 TM	Benzene	1.711	1.605	6.2	94	0.00
30 T	Dibromomethane	0.202	0.189	6.4	94	0.00
31 TMC	1,2-Dichloropropane	0.478	0.453	5.2	93	0.00
32 TM	Trichloroethene	0.428	0.410	4.2	95	0.00
33 TM	Bromodichloromethane	0.502	0.493	1.8	94	0.00
34 T	2-Chlorovinylethylether	0.101	0.093#	7.9	93	0.00
35 TM	cis-1,3-Dichloropropene	0.610	0.596	2.3	94	0.00
36	4-Methyl-2-pentanone (MIBK)	0.250	0.236	5.6	95	0.00
37 TM	trans-1,3-Dichloropropene	0.471	0.457	3.0	93	0.00
38 TM	1,1,2-Trichloroethane	0.226	0.208	8.0	90	0.00
39 S	Toluene-d8	1.261	1.145	9.2	92	0.00
40 TMC	Toluene	0.973	0.918	5.7	94	0.00
41 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
42 T	1,3-Dichloropropane	0.566	0.529	6.5	89	0.00
43 T	2-Hexanone	0.189	0.191	-1.1	101	0.00
44 TM	Dibromochloromethane	0.340	0.322	5.3	92	0.00
45 T	1,2-Dibromoethane	0.284	0.267	6.0	89	0.00
46 TM	Tetrachloroethene	0.448	0.434	3.1	93	0.00
47 T	1,1,1,2-Tetrachloroethane	0.370	0.352	4.9	94	0.00
48 TMP	Chlorobenzene	1.175	1.105	6.0	91	0.00

(#) = Out of Range  
 03181103.D 031711.M

Fri Mar 18 12:04:01 2011

142 of 280

Pag

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181103.D Vial: 9  
 Acq On : 18 Mar 2011 8:26 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT2.P

: C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Method : USEPA Method 8260B

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 TMC	Ethylbenzene	2.214	2.102	5.1	92	0.00
50 T	m,p-Xylenes	0.775	0.734	5.3	92	0.00
51 T	Styrene	1.176	1.166	0.9	93	0.00
52 T	o-Xylene	0.754	0.708	6.1	93	0.00
53 S	4-Bromofluorobenzene	0.548	0.506	7.7	92	0.00
54	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
55 TMP	Bromoform	0.362	0.347	4.1	89	0.00
56 TMP	1,1,2,2-Tetrachloroethane	0.732	0.686	6.3	91	0.00
57 T	1,2,3-Trichloropropane	0.159	0.157	1.3	91	0.00
58 T	Isopropylbenzene	3.828	3.772	1.5	92	0.00
59 T	Bromobenzene	0.883	0.851	3.6	88	0.00
60 T	n-Propylbenzene	5.465	5.260	3.8	91	0.00
61 T	2-Chlorotoluene	3.202	3.032	5.3	91	0.00
62 T	4-Chlorotoluene	3.174	3.049	3.9	90	0.00
63 T	1,3,5-Trimethylbenzene	3.308	3.267	1.2	93	0.00
64 T	tert-Butylbenzene	2.816	2.720	3.4	91	0.00
65 T	1,2,4-Trimethylbenzene	3.325	3.184	4.2	91	0.00
66 T	sec-Butylbenzene	4.827	4.601	4.7	90	0.00
67 TM	1,3-Dichlorobenzene	1.800	1.716	4.7	91	0.00
68 TM	1,4-Dichlorobenzene	1.812	1.717	5.2	93	0.00
69 T	p-Isopropyltoluene	3.690	3.608	2.2	91	0.00
70 TM	1,2-Dichlorobenzene	1.565	1.450	7.3	88	0.00
71 T	n-Butylbenzene	4.107	4.003	2.5	89	0.00
72 T	1,2-Dibromo-3-chloropropane	0.098	0.092#	6.1	88	0.00
73 T	1,2,4-Trichlorobenzene	1.011	0.983	2.8	87	0.00
74 T	Naphthalene	1.341	1.216	9.3	81	0.00
75 T	Hexachlorobutadiene	0.646	0.648	-0.3	92	0.00
76 T	1,2,3-Trichlorobenzene	0.824	0.807	2.1	87	0.00

(#) = Out of Range  
 03181103.D 031711.M

SPCC's out = 0 CCC's out = 0  
 Fri Mar 18 12:04:01 2011

Page

143 of 280

## 624-CCV

Data File Name 03181104.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\031811\  
 Operator LC  
 Date Acquired 3/18/2011 8:57  
 Acq. Method File 8260B  
 Sample Name 20 PPB CCV  
 Instrument Name GCMS7

13/21/11

Internal Standard	Target Response	CCV Response	Low	High	T/F
Pentafluorobenzene	157055	164363	82181.5	328726	TRUE
1,4-Difluorobenzene	276535	291205	145602.5	582410	TRUE
Chlorobenzene-d5	227866	242488	121244	484976	TRUE
1,4-Dichlorobenzene-d4	106277	112264	56132	224528	TRUE

Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	19.24	20.00	96.20	60	150	TRUE
Chloromethane	19.55	20.00	97.76	0	204	TRUE
Vinyl chloride	19.88	20.00	99.42	4	196	TRUE
Bromomethane	17.87	20.00	89.35	14	186	TRUE
Chloroethane	19.27	20.00	96.34	38	162	TRUE
Trichlorofluoromethane	16.71	20.00	83.55	48	152	TRUE
Acetone	31.46	20.00	157.28	10	150	FALSE
Iodomethane	20.70	20.00	103.51	70	140	TRUE
1,1-Dichloroethene	18.53	20.00	90.53	60	140	TRUE
Methylene chloride	18.11	20.00	93.47	60	140	TRUE
Freon 113	18.69	20.00	93.60	70	130	TRUE
Carbon disulfide	18.72	20.00	96.13	70	130	TRUE
trans-1,2-Dichloroethene	19.23	20.00	87.91	70	130	TRUE
MTBE	17.58	20.00	87.91	72	128	TRUE
1,1-Dichloroethane	18.58	20.00	92.92	40	150	TRUE
Vinyl acetate	17.54	20.00	87.72	40	150	TRUE
2-Butanone (MEK)	24.56	20.00	122.78	40	120	TRUE
cis-1,2-Dichloroethene	18.28	20.00	91.41	80	120	TRUE
Bromochloromethane	18.77	20.00	93.86	80	132	TRUE
Chloroform	18.75	20.00	93.75	68	132	TRUE
2,2-Dichloropropane	20.01	20.00	100.05	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>19.00</b>	<b>20.00</b>	<b>95.02</b>	<b>80</b>	<b>135</b>	<b>TRUE</b>
1,2-Dichloroethane	18.24	20.00	91.19	68	132	TRUE
1,1,1-Trichloroethane	19.74	20.00	98.70	75	125	TRUE
1,1-Dichloropropene	19.34	20.00	96.70	80	120	TRUE
Carbon tetrachloride	20.11	20.00	100.56	73	127	TRUE
Benzene	19.23	20.00	96.17	64	136	TRUE
Dibromomethane	19.15	20.00	95.74	80	120	TRUE
1,2-Dichloropropane	18.68	20.00	93.40	34	166	TRUE
Trichloroethene	19.02	20.00	95.09	66	134	TRUE
Bromodichloromethane	19.00	20.00	95.00	66	134	TRUE
2-Chlorovinylether	20.20	20.00	101.02	0	224	TRUE
cis-1,3-Dichloropropene	19.46	20.00	97.28	24	176	TRUE
4-Methyl-2-pentanone (MIB)	18.21	20.00	91.06	60	130	TRUE
trans-1,3-Dichloropropene	18.75	20.00	93.77	50	150	TRUE

3/18/2011 12:05 PM

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144 of 280

1,1,2-Trichloroethane	18.28	20.00	91.42	71	129	TRUE
Toluene-d8	<b>19.04</b>	<b>20.00</b>	<b>95.18</b>	<b>80</b>	<b>125</b>	<b>TRUE</b>
Toluene	19.45	20.00	97.26	74	126	TRUE
1,3-Dichloropropane	18.89	20.00	94.47	80	120	TRUE
2-Hexanone	23.20	20.00	116.02	20	150	TRUE
Dibromochloromethane	18.58	20.00	92.89	68	132	TRUE
1,2-Dibromoethane	18.58	20.00	98.71	74	126	TRUE
Tetrachloroethene	19.74	20.00	95.06	80	120	TRUE
1,1,1,2-Tetrachloroethane	19.01	20.00	95.73	66	134	TRUE
Chlorobenzene	19.15	20.00	98.03	59	141	TRUE
Ethylbenzene	19.61	20.00	98.97	60	140	TRUE
m,p-Xylenes	19.79	20.00	99.37	80	120	TRUE
Styrene	19.87	20.00	94.92	80	120	TRUE
o-Xylene	18.98	<b>20.00</b>	<b>93.91</b>	<b>75</b>	<b>125</b>	<b>TRUE</b>
<b>4-Bromofluorobenzene</b>	<b>18.78</b>	<b>20.00</b>	<b>97.60</b>	<b>71</b>	<b>129</b>	<b>TRUE</b>
Bromoform	19.52	20.00	93.85	60	140	TRUE
1,1,2,2-Tetrachloroethane	18.77	20.00	91.51	70	130	TRUE
1,2,3-Trichloropropane	18.30	20.00	100.39	80	130	TRUE
Isopropylbenzene	20.08	20.00	98.72	80	120	TRUE
Bromobenzene	19.74	20.00	100.42	75	130	TRUE
n-Propylbenzene	20.08	20.00	97.38	80	120	TRUE
2-Chlorotoluene	19.48	20.00	97.79	80	120	TRUE
4-Chlorotoluene	19.56	20.00	98.62	80	130	TRUE
1,3,5-Trimethylbenzene	19.72	20.00	100.35	80	120	TRUE
tert-Butylbenzene	20.07	20.00	98.03	80	120	TRUE
1,2,4-Trimethylbenzene	19.61	20.00	99.82	80	120	TRUE
sec-Butylbenzene	19.96	20.00	97.41	73	127	TRUE
1,3-Dichlorobenzene	19.48	20.00	95.90	63	137	TRUE
1,4-Dichlorobenzene	19.18	20.00	100.39	80	130	TRUE
p-Isopropyltoluene	20.08	20.00	94.34	63	137	TRUE
1,2-Dichlorobenzene	18.87	20.00	102.05	80	130	TRUE
n-Butylbenzene	20.41	20.00	96.91	50	150	TRUE
1,2-Dibromo-3-chloropropane	19.38	20.00	102.74	50	150	TRUE
1,2,4-Trichlorobenzene	20.55	20.00	96.94	40	150	TRUE
Naphthalene	19.39	20.00	102.84	40	150	TRUE
Hexachlorobutadiene	20.57	20.00	98.19	60	140	TRUE
1,2,3-Trichlorobenzene	19.64	20.00				

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D Vial: 10  
 Acq On : 18 Mar 2011 8:57 am Operator: LC  
 Sample : 20 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:04 2011

Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:04 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

**Internal Standards**

	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	157055	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	276535	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	227866	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	106277	25.00	ug/L	0.00

**System Monitoring Compounds**

23) Dibromofluoromethane	10.08	113	75103	19.00	ug/L	0.00
Spiked Amount	25.000			Recovery	=	76.00%
39) Toluene-d8	14.11	98	265500	19.04	ug/L	0.00
Spiked Amount	25.000			Recovery	=	76.16%
53) 4-Bromofluorobenzene	17.74	95	93796	18.78	ug/L	0.00
Spiked Amount	25.000			Recovery	=	75.12%

**Target Compounds**

2) Dichlorodifluoromethane	4.60	85	142752	19.24	ug/L	98
3) Chloromethane	4.89	50	239859	19.55	ug/L	100
4) Vinyl chloride	5.18	62	217174	19.88	ug/L	100
5) Bromomethane	5.77	94	101214	17.87	ug/L	100
6) Chloroethane	5.98	64	111571	19.27	ug/L	98
7) Trichlorofluoromethane	6.78	101	126902	16.71	ug/L	98
8) Acetone	6.93	43	28819	31.46	ug/L	99
9) Iodomethane	7.57	142	72614	20.70	ug/L	95
10) 1,1-Dichloroethene	7.71	84	82093	18.53	ug/L	97
11) Methylene chloride	7.78	101	94356	18.11	ug/L	99
12) Freon 113	8.02	76	295029	18.69	ug/L	98
13) Carbon disulfide	8.59	96	94225	18.72	ug/L	100
14) trans-1,2-Dichloroethene	8.73	73	147259	19.23	ug/L	96
15) MTBE	8.92	63	190004	17.58	ug/L	100
16) 1,1-Dichloroethane	9.08	43	139327	18.58	ug/L	100
17) Vinyl acetate	9.46	72	6021	17.54	ug/L	100
18) 2-Butanone (MEK)	9.66	96	92791	24.56	ug/L	44
19) cis-1,2-Dichloroethene	9.87	128	34867	18.28	ug/L	98
20) Bromochloromethane	9.93	83	158181	18.77	ug/L	99
21) Chloroform	10.03	77	136873	18.75	ug/L	99
22) 2,2-Dichloropropane	10.77	62	93902	20.01	ug/L	98
24) 1,2-Dichloroethane	10.90	97	119584	20.11	ug/L	98
25) 1,1,1-Trichloroethane	11.14	75	136911	19.34	ug/L	100
27) 1,1-Dichloropropene	11.38	117	98296	19.23	ug/L	99
28) Carbon tetrachloride	11.43	78	363998	19.15	ug/L	96
29) Benzene	12.17	93	42873	18.68	ug/L	99
30) Dibromomethane	12.21	63	98741	19.02	ug/L	98
31) 1,2-Dichloropropane	12.26	95	90004	19.00	ug/L	96
32) Trichloroethene	12.32	83	105561	20.20	ug/L	99
33) Bromodichloromethane	12.85	63	20004	19.46	ug/L	98
34) 2-Chlorovinylethylether	13.16	75	131213	18.21	ug/L	97
35) cis-1,3-Dichloropropene	13.30	43	50309	18.75	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.73	75	97604	18.28	ug/L	98
37) trans-1,3-Dichloropropene	13.95	83	45752	19.45	ug/L	98
38) 1,1,2-Trichloroethane	14.20	92	209288	18.89	ug/L	100
40) Toluene	14.26	76	97422			
42) 1,3-Dichloropropane						

(#) = qualifier out of range (m) = manual integration  
 03181104.D 031711.M Fri Mar 18 12:04:43 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D Vial: 10  
 Acq On : 18 Mar 2011 8:57 am Operator: LC  
 Sample : 20 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:04 2011  
 Quant 031711.M (RTE Integrator)

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	39890	23.20	ug/L	# 94
44) Dibromochloromethane	14.64	129	57602	18.58	ug/L	98
45) 1,2-Dibromoethane	14.97	107	48100	18.58	ug/L	# 95
46) Tetrachloroethene	15.20	166	80678	19.74	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	64157	19.01	ug/L	98
48) Chlorobenzene	16.11	112	205029	19.15	ug/L	98
49) Ethylbenzene	16.37	91	395546	19.61	ug/L	99
50) m,p-Xylenes	16.64	106	139874	19.79	ug/L	98
51) Styrene	17.08	104	212992	19.87	ug/L	99
52) o-Xylene	17.19	106	130400	18.98	ug/L	99
55) Bromoform	16.81	173	30036	19.52	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	58407	18.77	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	12391	18.30	ug/L	95
58) Isopropylbenzene	17.68	105	326744	20.08	ug/L	100
59) Bromobenzene	18.05	156	74132	19.74	ug/L	98
60) n-Propylbenzene	18.30	91	466596	20.08	ug/L	100
61) 2-Chlorotoluene	18.44	91	265078	19.48	ug/L	99
62) 4-Chlorotoluene	18.55	91	263901	19.56	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	277370	19.72	ug/L	98
64) tert-Butylbenzene	19.09	119	240291	20.07	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	277139	19.61	ug/L	100
66) sec-Butylbenzene	19.37	105	409665	19.96	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	149039	19.48	ug/L	100
68) 1,4-Dichlorobenzene	19.56	146	147736	19.18	ug/L	100
69) p-Isopropyltoluene	19.60	119	314903	20.08	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	125550	18.87	ug/L	100
71) n-Butylbenzene	20.11	91	356319	20.41	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	8037	19.38	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	88303	20.55	ug/L	100
74) Naphthalene	22.62	128	110494	19.39	ug/L	99
75) Hexachlorobutadiene	22.68	225	56455	20.57	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	68806	19.64	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03181104.D 031711.M Fri Mar 18 12:04:44 2011

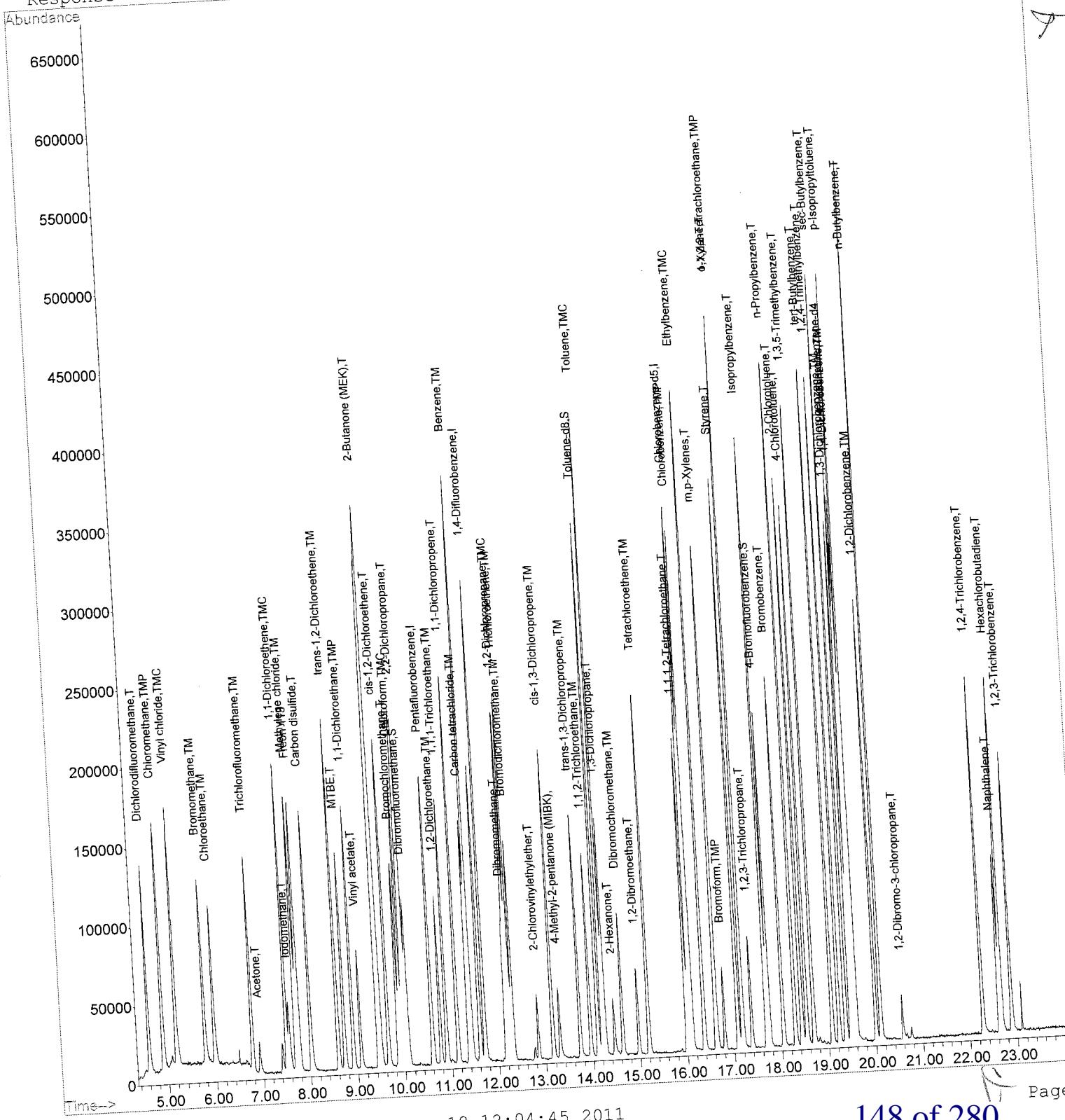
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181104.D  
 Acq On : 18 Mar 2011 8:57 am  
 Sample : 20 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:04 2011  
 Quant Results File: 031711.RES

Vial: 10  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03181104.D



03181104.D 031711.M

Fri Mar 18 12:04:45 2011

148 of 280

Page

## Quantitation Report (OT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D  
 Acq On : 18 Mar 2011 9:28 am  
 Sample : -BS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011  
 Quant Results File: 031711.RES

Vial: 12  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

✓ 3/21/11

	R.T.	QIon	Response	Conc Units	Dev (Min)
<b>Internal Standards</b>					
1) Pentafluorobenzene	10.60	168	182246	25.00 ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	312595	25.00 ug/L	0.00
41) Chlorobenzene-d5	16.07	117	260286	25.00 ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	121474	25.00 ug/L	0.00
<b>System Monitoring Compounds</b>					
23) Dibromofluoromethane	10.08	113	97638	21.29 ug/L	0.00
Spiked Amount 25.000			Recovery =	85.16%	
39) Toluene-d8	14.11	98	344883	21.88 ug/L	0.00
Spiked Amount 25.000			Recovery =	87.52%	
53) 4-Bromofluorobenzene	17.75	95	121059	21.22 ug/L	0.00
Spiked Amount 25.000			Recovery =	84.88%	
<b>Target Compounds</b>					
2) Dichlorodifluoromethane	4.59	85	182948	21.25 ug/L	97
3) Chloromethane	4.89	50	314246	22.08 ug/L	99
4) Vinyl chloride	5.18	62	280737	22.15 ug/L	99
5) Bromomethane	5.78	94	135984	20.65 ug/L	99
6) Chloroethane	5.98	64	142496	21.21 ug/L	98
7) Trichlorofluoromethane	6.77	101	172056	19.53 ug/L	98
8) Acetone	6.93	43	31094	28.97 ug/L	99
9) Iodomethane	7.57	142	100662	24.71 ug/L	98
10) 1,1-Dichloroethene	7.51	96	105539	20.53 ug/L	97
11) Methylene chloride	7.71	84	123339	20.40 ug/L	99
12) Freon 113	7.77	101	123416	20.28 ug/L	100
13) Carbon disulfide	8.02	76	442180	24.18 ug/L	99
14) trans-1,2-Dichloroethene	8.59	96	118570	20.85 ug/L	100
15) MTBE	8.73	73	188026	19.35 ug/L	99
16) 1,1-Dichloroethane	8.92	63	239379	20.18 ug/L	100
17) Vinyl acetate	9.08	43	235500	25.56 ug/L	65
18) 2-Butanone (MEK)	9.47	72	6862	24.13 ug/L	98
19) cis-1,2-Dichloroethene	9.65	96	117987	20.03 ug/L	93
20) Bromochloromethane	9.86	128	44531	20.66 ug/L	100
21) Chloroform	9.92	83	194653	19.88 ug/L	99
22) 2,2-Dichloropropane	10.03	77	169158	21.31 ug/L	100
24) 1,2-Dichloroethane	10.77	62	120404	20.15 ug/L	99
25) 1,1,1-Trichloropropene	10.90	97	148836	21.17 ug/L	99
27) 1,1-Dichloropropene	11.14	75	174100	21.76 ug/L	99
28) Carbon tetrachloride	11.39	117	122228	22.12 ug/L	99
29) Benzene	11.44	78	438739	20.51 ug/L	99
30) Dibromomethane	12.16	93	53588	21.17 ug/L	99
31) 1,2-Dichloropropane	12.20	63	127359	21.31 ug/L	99
32) Trichloroethene	12.26	95	113932	21.30 ug/L	100
33) Bromodichloromethane	12.32	83	137464	21.89 ug/L	100
34) 2-Chlorovinylethylether	12.86	63	31470	28.71 ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	166307	21.82 ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	73932	23.68 ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	134449	22.85 ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	60857	21.51 ug/L	98
40) Toluene	14.21	92	262154	21.55 ug/L	98
42) 1,3-Dichloropropane	14.27	76	125581	21.32 ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03181105.D 031711.M Fri Mar 18 12:05:25 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D Vial: 12  
 Acq On : 18 Mar 2011 9:28 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:05 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : USEPA Method 8260B  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	50927	25.93	ug/L	# 96
44) Dibromochloromethane	14.64	129	76883	21.71	ug/L	99
45) 1,2-Dibromoethane	14.98	107	65244	22.07	ug/L	99
46) Tetrachloroethene	15.20	166	101494	21.74	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	83912	21.77	ug/L	98
48) Chlorobenzene	16.12	112	264705	21.64	ug/L	100
49) Ethylbenzene	16.37	91	504751	21.90	ug/L	99
50) m,p-Xylenes	16.63	106	174150	21.57	ug/L	99
51) Styrene	17.09	104	278172	22.72	ug/L	97
52) o-Xylene	17.19	106	168060	21.42	ug/L	96
55) Bromoform	16.81	173	39843	22.65	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	80936	22.76	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	18587	24.02	ug/L	99
58) Isopropylbenzene	17.69	105	459105	24.68	ug/L	100
59) Bromobenzene	18.04	156	98916	23.05	ug/L	100
60) n-Propylbenzene	18.30	91	622654	23.45	ug/L	100
61) 2-Chlorotoluene	18.44	91	339207	21.80	ug/L	98
62) 4-Chlorotoluene	18.54	91	353005	22.89	ug/L	100
63) 1,3,5-Trimethylbenzene	18.69	105	372674	23.19	ug/L	100
64) tert-Butylbenzene	19.08	119	307984	22.51	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	376349	23.29	ug/L	100
66) sec-Butylbenzene	19.38	105	525907	22.42	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	194463	22.24	ug/L	98
68) 1,4-Dichlorobenzene	19.56	146	195820	22.94	ug/L	100
69) p-Isopropyltoluene	19.60	119	411186	21.96	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	167002	23.18	ug/L	99
71) n-Butylbenzene	20.11	91	462490	23.73	ug/L	94
72) 1,2-Dibromo-3-chloropropan	20.58	157	11249	24.10	ug/L	100
73) 1,2,4-Trichlorobenzene	22.27	180	118367	23.13	ug/L	100
74) Naphthalene	22.62	128	150647	23.65	ug/L	98
75) Hexachlorobutadiene	22.68	225	74201	23.40	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	93730			

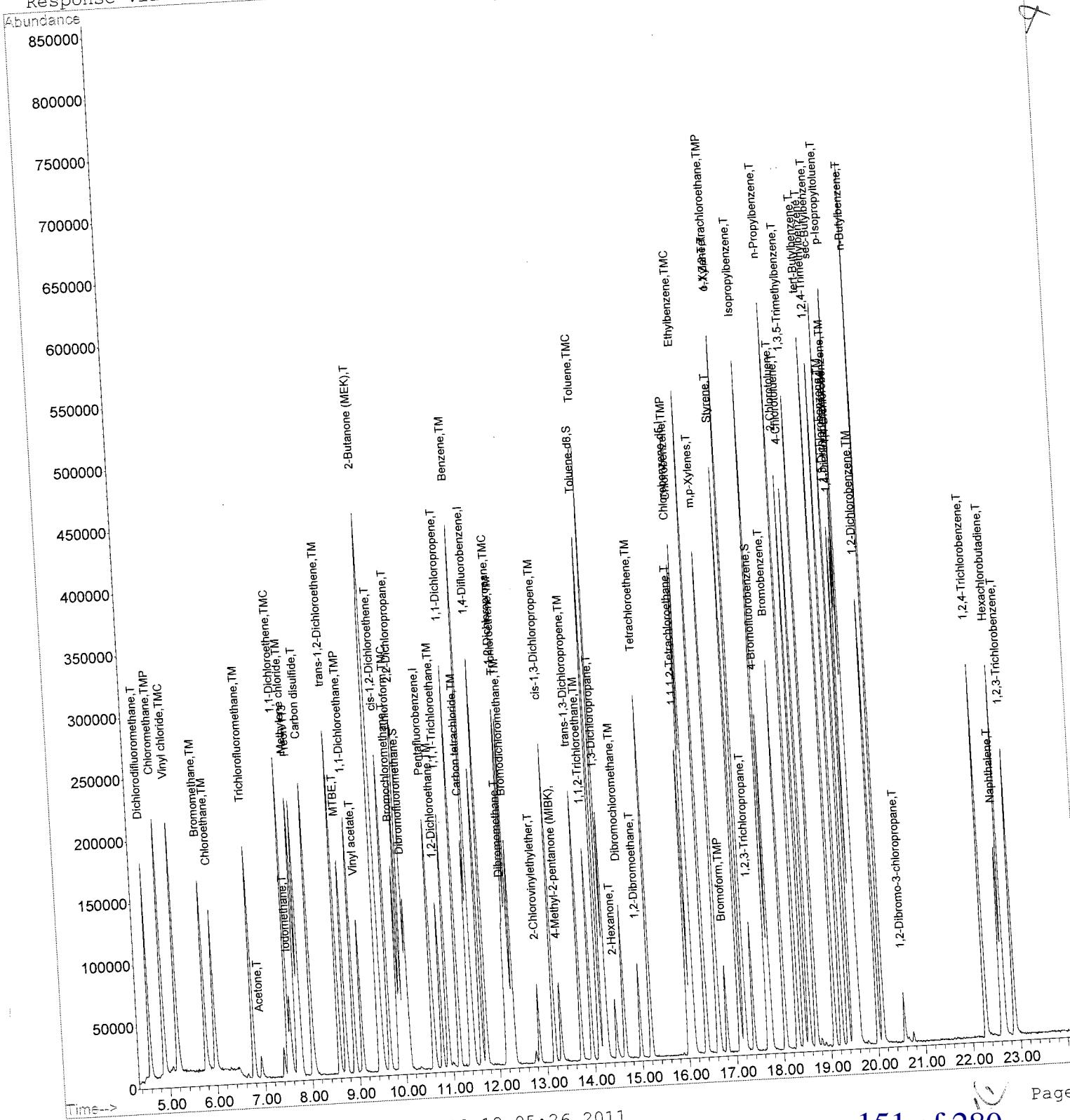
(#) = qualifier out of range (m) = manual integration  
 03181105.D 031711.M Fri Mar 18 12:05:25 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181105.D      Vial: 12  
 Acq On : 18 Mar 2011 9:28 am      Operator: LC  
 Sample : -BS1      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:05 2011      Response via: Initial Calibration

C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

TIC: 03181105.D



## Quantitation Report (OT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D Vial: 13  
 Acq On : 18 Mar 2011 9:58 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:05 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator) *1/3/21/11e*

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	175804	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	306741	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	252270	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	117522	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	96696	21.86	ug/L	0.00
Spiked Amount 25.000			Recovery =	87.44%		
39) Toluene-d8	14.11	98	334399	21.62	ug/L	-0.01
Spiked Amount 25.000			Recovery =	86.48%		
53) 4-Bromofluorobenzene	17.75	95	118487	21.43	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.72%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	180997	21.79	ug/L	98
3) Chloromethane	4.89	50	318533	23.20	ug/L	98
4) Vinyl chloride	5.18	62	274420	22.45	ug/L	100
5) Bromomethane	5.77	94	141075	22.19	ug/L	97
6) Chloroethane	5.98	64	144438	22.28	ug/L	98
7) Trichlorofluoromethane	6.77	101	207424	24.40	ug/L	96
8) Acetone	6.93	43	31757	30.90	ug/L	99
9) Iodomethane	7.57	142	113288	28.80	ug/L	98
10) 1,1-Dichloroethene	7.51	96	108122	21.81	ug/L	97
11) Methylene chloride	7.70	84	121648	20.85	ug/L	97
12) Freon 113	7.77	101	122012	20.78	ug/L	98
13) Carbon disulfide	8.02	76	438717	24.87	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	120249	21.92	ug/L	98
15) MTBE	8.73	73	189019	20.16	ug/L	99
16) 1,1-Dichloroethane	8.91	63	245777	21.47	ug/L	100
17) Vinyl acetate	9.07	43	228970	25.76	ug/L	65
18) 2-Butanone (MEK)	9.46	72	6704	24.43	ug/L	98
19) cis-1,2-Dichloroethene	9.65	96	114286	20.12	ug/L	94
20) Bromochloromethane	9.87	128	44372	21.34	ug/L	99
21) Chloroform	9.92	83	196139	20.77	ug/L	98
22) 2,2-Dichloropropane	10.03	77	164872	21.53	ug/L	100
24) 1,2-Dichloroethane	10.77	62	120017	20.82	ug/L	99
25) 1,1,1-Trichloroethane	10.90	97	147857	21.80	ug/L	99
27) 1,1-Dichloropropene	11.14	75	173644	22.11	ug/L	99
28) Carbon tetrachloride	11.38	117	123105	22.71	ug/L	99
29) Benzene	11.44	78	443552	21.13	ug/L	98
30) Dibromomethane	12.16	93	53816	21.67	ug/L	98
31) 1,2-Dichloropropane	12.21	63	126500	21.57	ug/L	100
32) Trichloroethene	12.26	95	112981	21.52	ug/L	99
33) Bromodichloromethane	12.32	83	130685	21.21	ug/L	98
34) 2-Chlorovinylideneether	12.85	63	37137	34.83	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	163208	21.82	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	71123	23.21	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	128270	22.22	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	59287	21.36	ug/L	99
40) Toluene	14.21	92	265245	22.22	ug/L	99
42) 1,3-Dichloropropane	14.27	76	121210	21.23	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03181106.D 031711.M Fri Mar 18 12:06:02 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D Vial: 13  
 Acq On : 18 Mar 2011 9:58 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:05 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

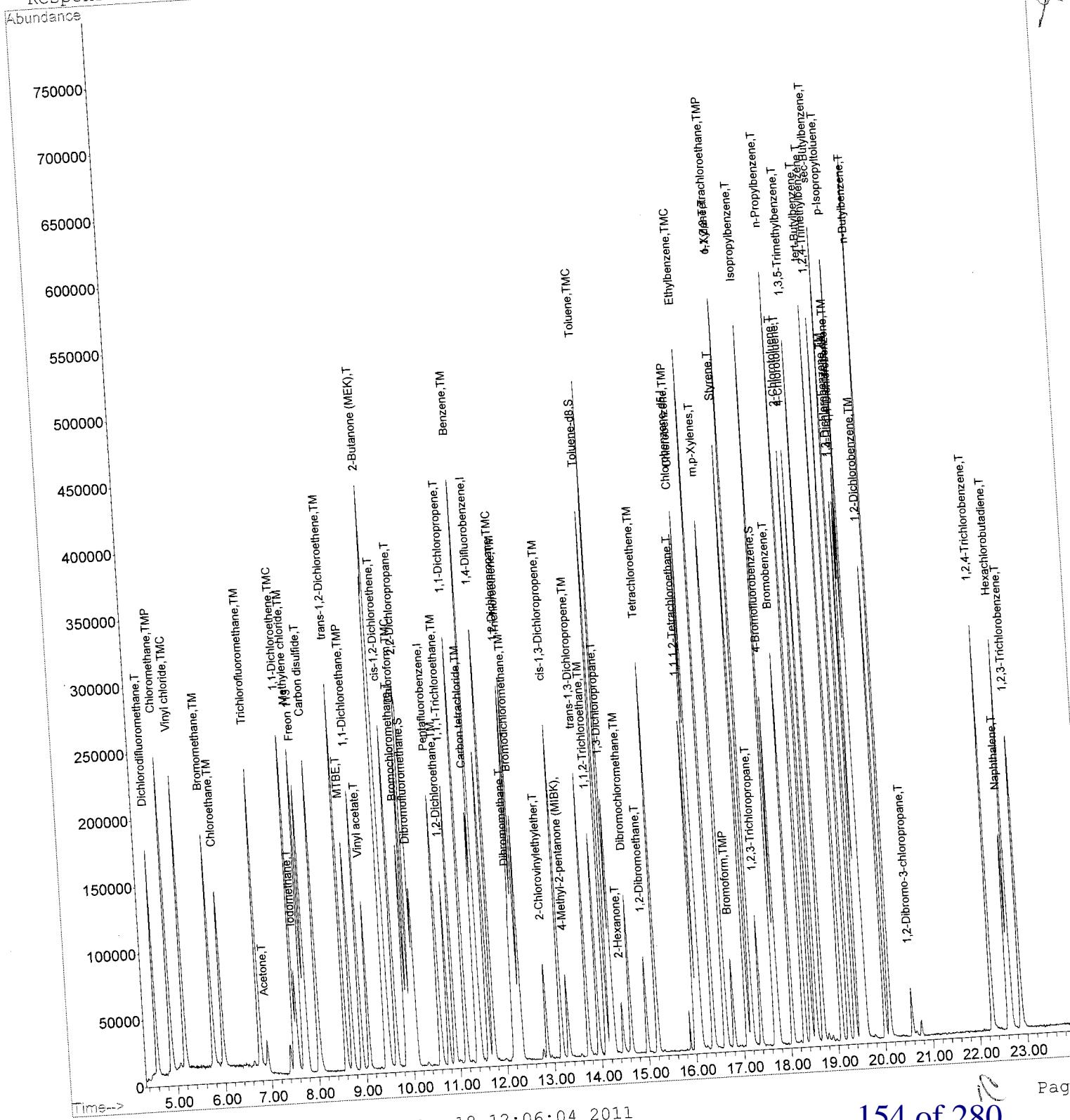
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	43474	22.84	ug/L	# 99
44) Dibromochloromethane	14.64	129	75269	21.93	ug/L	100
45) 1,2-Dibromoethane	14.98	107	62868	21.94	ug/L	100
46) Tetrachloroethene	15.20	166	100471	22.21	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	80680	21.60	ug/L	98
48) Chlorobenzene	16.12	112	257066	21.68	ug/L	100
49) Ethylbenzene	16.37	91	488012	21.85	ug/L	100
50) m,p-Xylenes	16.63	106	172861	22.09	ug/L	99
51) Styrene	17.09	104	267379	22.53	ug/L	99
52) o-Xylene	17.19	106	161099	21.18	ug/L	98
55) Bromoform	16.81	173	37612	22.10	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.17	83	74403	21.62	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	16478	22.01	ug/L	95
58) Isopropylbenzene	17.69	105	449329	24.97	ug/L	100
59) Bromobenzene	18.04	156	94783	22.83	ug/L	100
60) n-Propylbenzene	18.30	91	600401	23.37	ug/L	99
61) 2-Chlorotoluene	18.44	91	330443	21.95	ug/L	99
62) 4-Chlorotoluene	18.54	91	337065	22.59	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	354260	22.78	ug/L	100
64) tert-Butylbenzene	19.08	119	296080	22.36	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	362793	23.21	ug/L	100
66) sec-Butylbenzene	19.37	105	515360	22.71	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	188143	22.24	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	187866	22.06	ug/L	100
69) p-Isopropyltoluene	19.61	119	401057	23.12	ug/L	99
70) 1,2-Dichlorobenzene	20.00	146	161564	21.96	ug/L	100
71) n-Butylbenzene	20.11	91	449063	23.26	ug/L	94
72) 1,2-Dibromo-3-chloropropan	20.58	157	10233	22.32	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	116766	24.57	ug/L	100
74) Naphthalene	22.62	128	147814	23.45	ug/L	100
75) Hexachlorobutadiene	22.67	225	71796	23.66	ug/L	99
76) 1,2,3-Trichlorobenzene	22.89	180	92276	23.82	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03181106.D 031711.M Fri Mar 18 12:06:03 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181106.D  
 Acq On : 18 Mar 2011 9:58 am  
 Sample : -BSD1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:05 2011  
 Quant Results File: 031711.RES  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 TIC: 03181106.D

Vial: 13  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181107.D Vial: 16  
 Acq On : 18 Mar 2011 10:29 am Operator: LC  
 Sample : -BLK1 Inst : GCMS7  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 12:06 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/21/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	181068	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	320896	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	263768	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	119729	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	97358	21.37	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.48%		
39) Toluene-d8	14.11	98	346709	21.42	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.68%		
53) 4-Bromofluorobenzene	17.74	95	119348	20.64	ug/L	0.00
Spiked Amount 25.000			Recovery =	82.56%		
<b>Target Compounds</b>						
5) Bromomethane	5.71	94	166	0.28	ug/L	NSW 92
8) Acetone	6.93	43	1482	Below Cal	#LOLNT	65
9) Iodomethane	7.58	142	159	0.17	ug/L	NSW 32
42) 1,3-Dichloropropane	14.11	76	3902	0.65	ug/L	WWT 68
73) 1,2,4-Trichlorobenzene	22.28	180	828	0.17	ug/L	LOLNT 82
74) Naphthalene	22.63	128	8346	1.30	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	793	0.20	ug/L	# 56

(#) = qualifier out of range (m) = manual integration  
 03181107.D 031711.M Fri Mar 18 12:06:26 2011

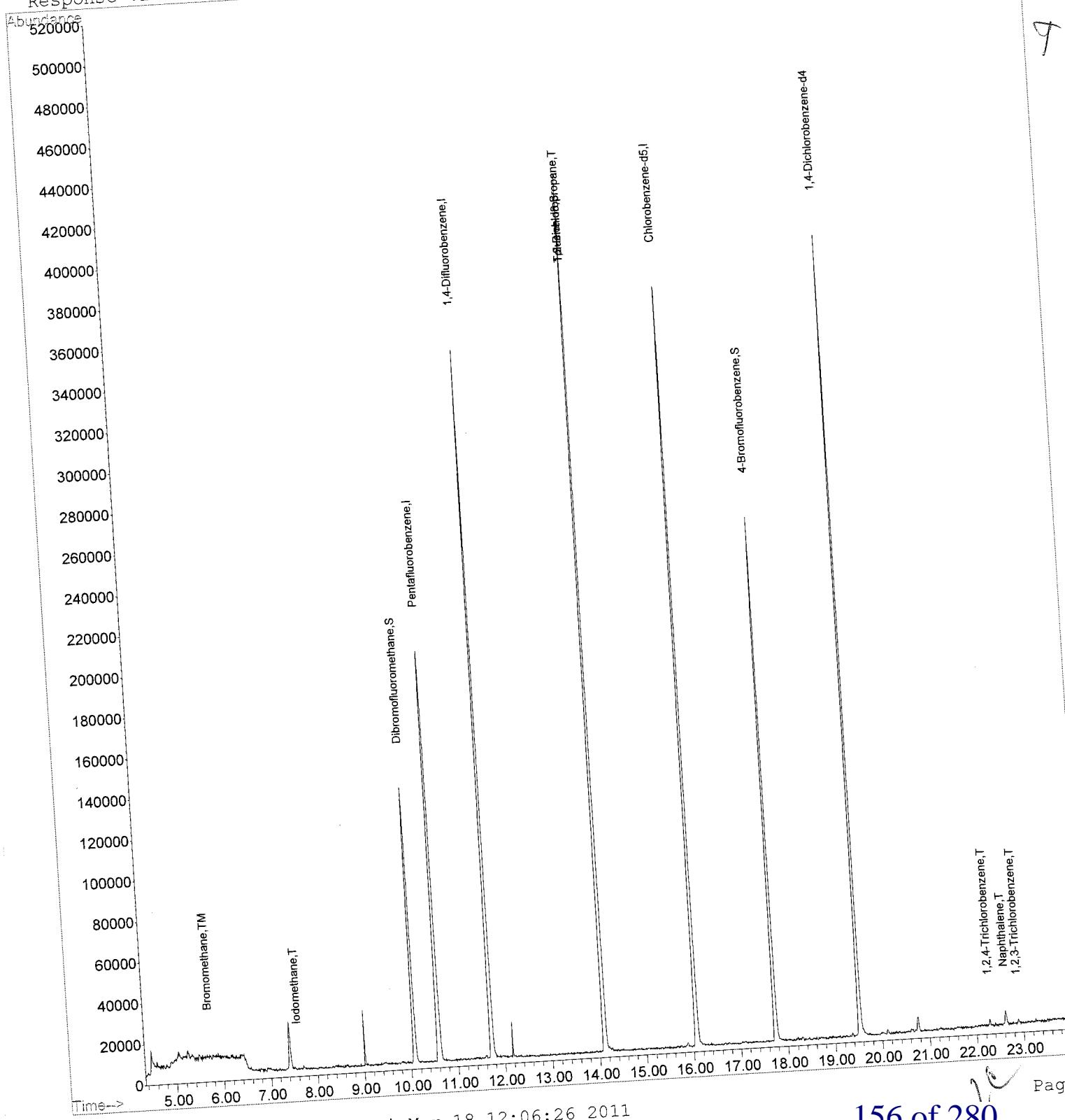
Quantitation Report

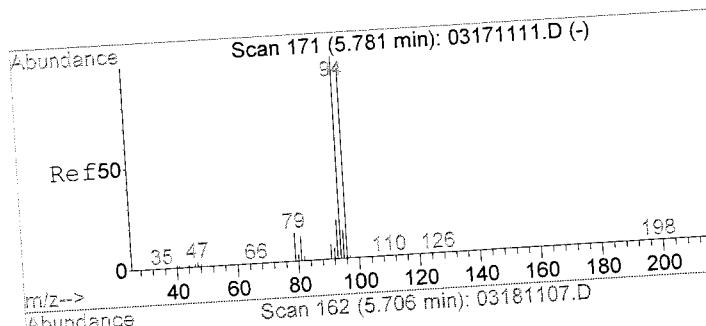
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 Acq On : 18 Mar 2011 10:29 am  
 Sample : -BLK1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 12:06 2011  
 Quant Results File: 031711.RES

Vial: 16  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

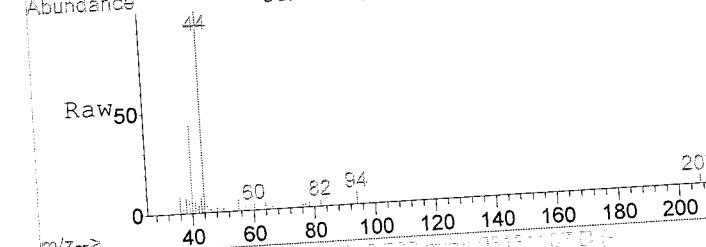
TIC: 03181107.D



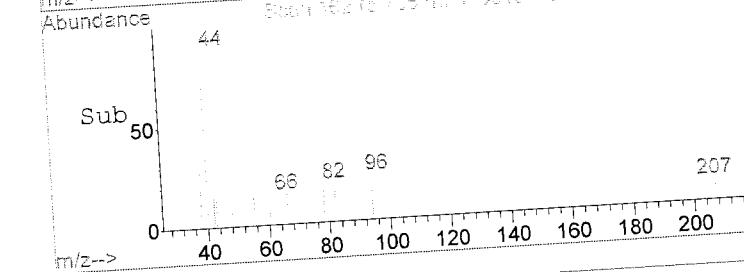
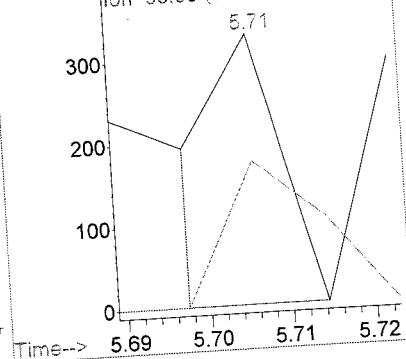


#5  
Bromomethane  
Concen: 0.28 ug/L  
RT: 5.71 min Scan# 162  
Delta R.T. -0.07 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

Tgt Ion: 94 Resp: 166  
Ion Ratio Lower Upper  
94 100  
96 84.9 74.0 111.0



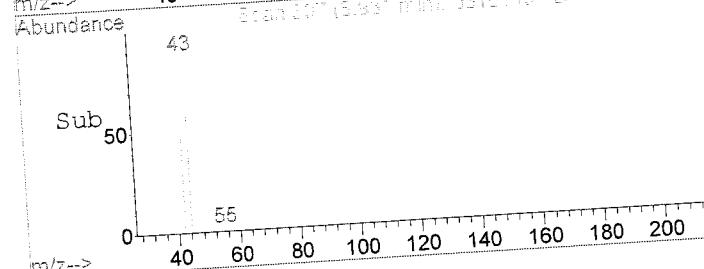
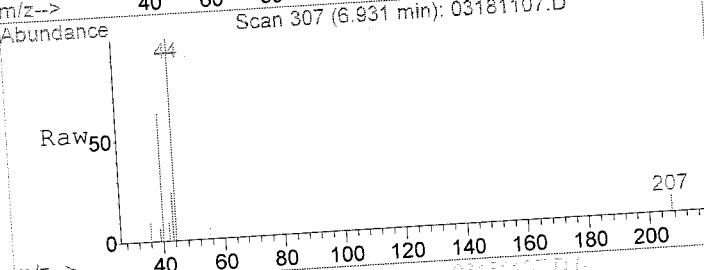
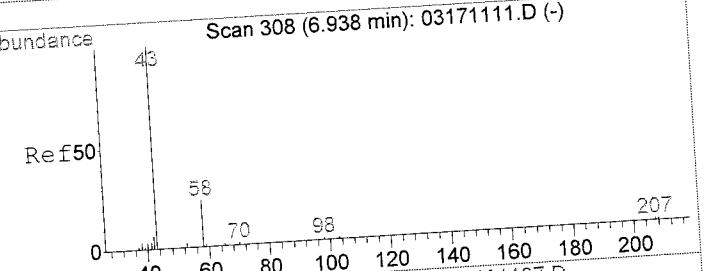
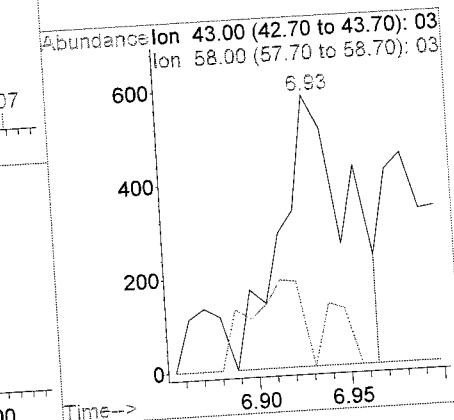
Abundance Ion 94.00 (93.70 to 94.70): 03  
Ion 96.00 (95.70 to 96.70): 03

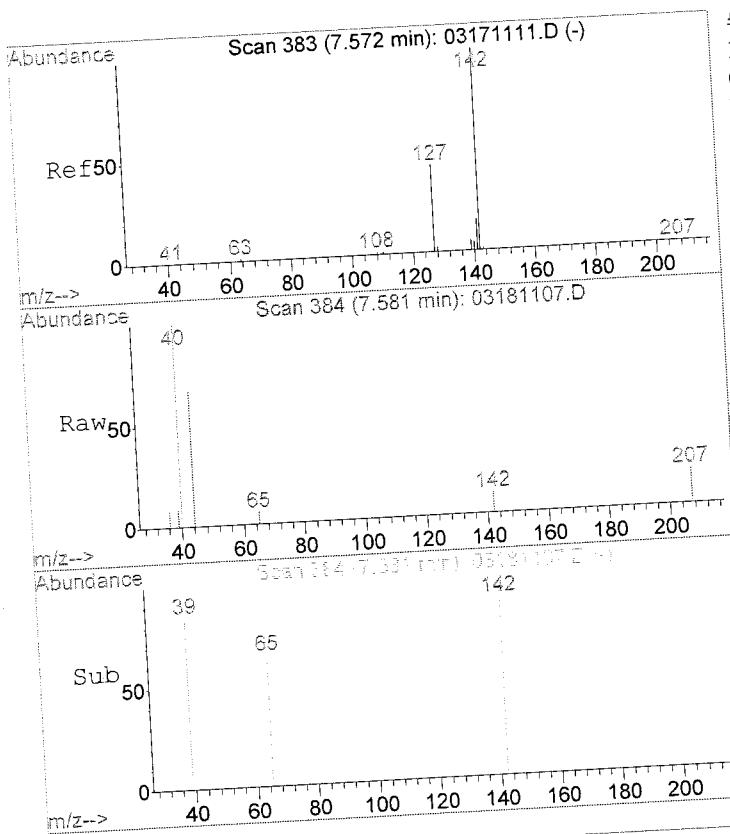


#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 307  
Delta R.T. -0.01 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

Tgt Ion: 43 Resp: 1482  
Ion Ratio Lower Upper  
43 100  
58 8.7 21.2 31.8#

Abundance Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03

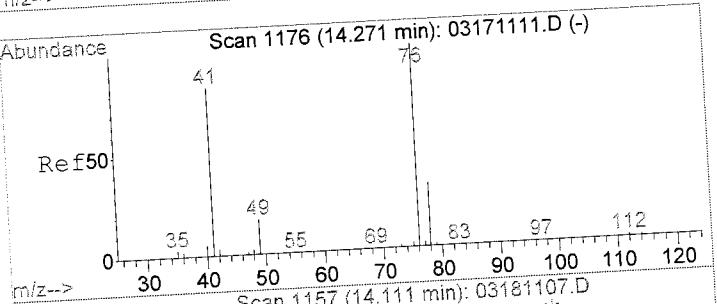
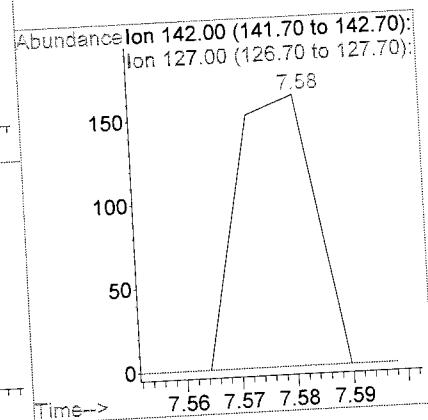




#9  
Iodomethane  
Concen: 0.17 ug/L  
RT: 7.58 min Scan# 384  
Delta R.T. 0.01 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

*N.Syn*

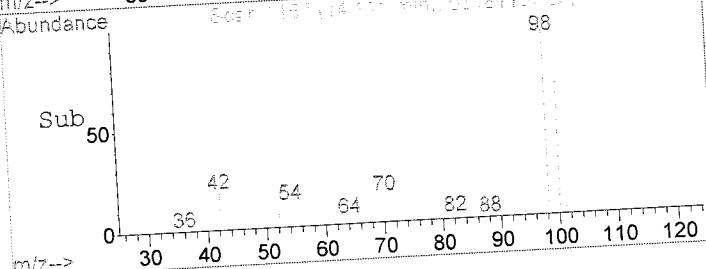
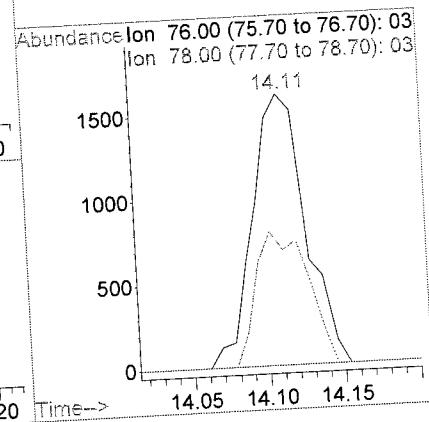
Tgt Ion: 142 Resp: 159  
Ion Ratio Lower Upper  
142 100  
127 0.0 35.5 53.3#

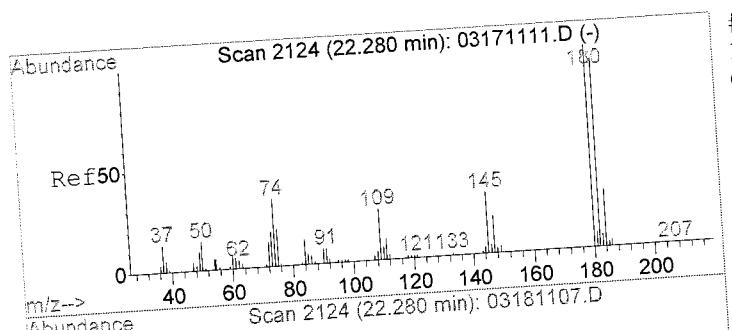


#42  
1,3-Dichloropropane  
Concen: 0.65 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

*WT*

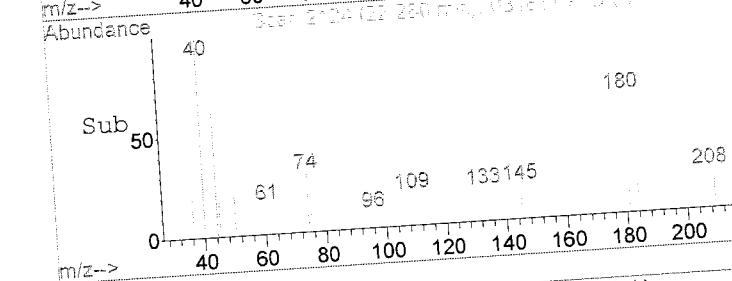
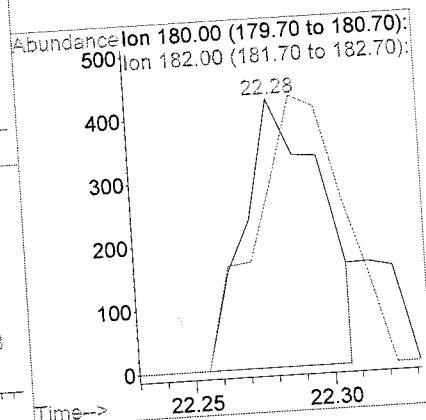
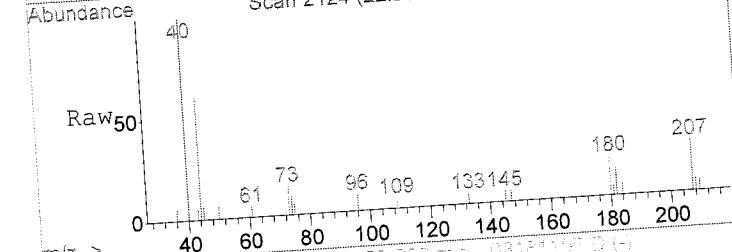
Tgt Ion: 76 Resp: 3902  
Ion Ratio Lower Upper  
76 100  
78 48.5 24.6 37.0#





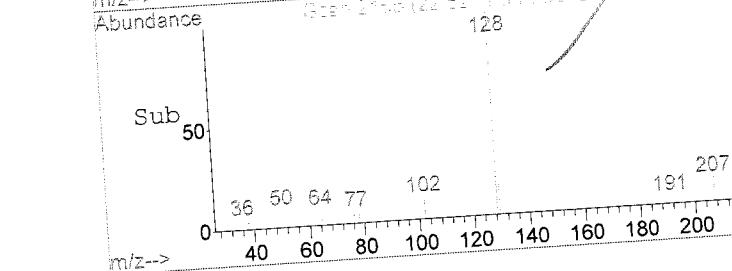
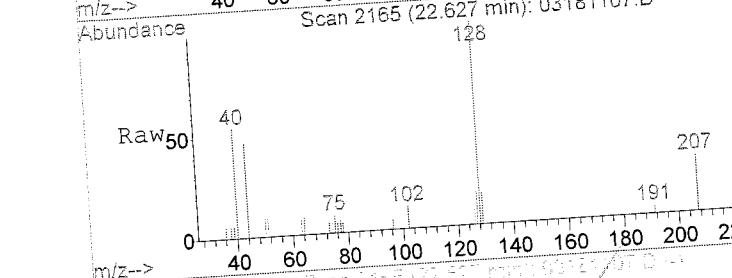
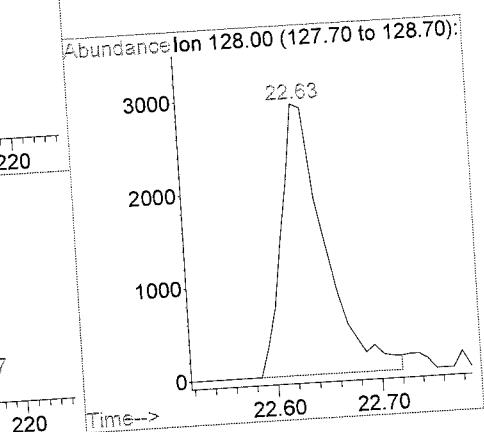
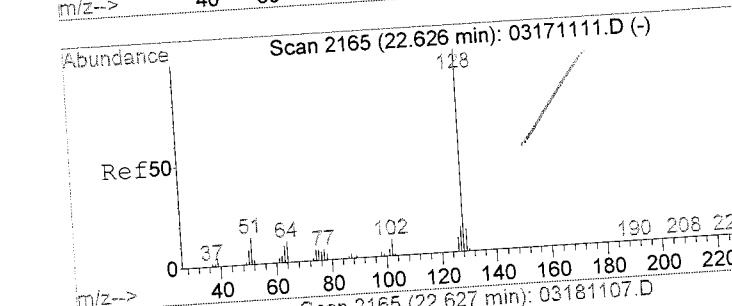
#73  
1,2,4-Trichlorobenzene  
Concen: 0.17 ug/L  
RT: 22.28 min Scan# 2124  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

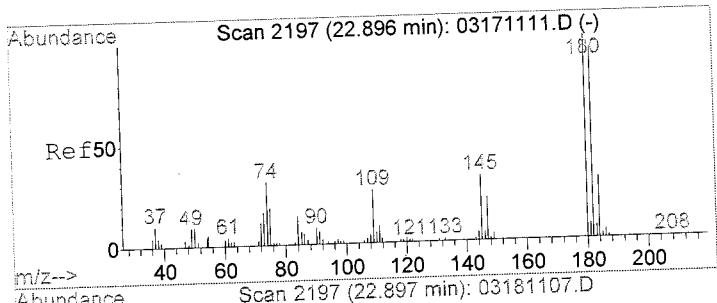
Tgt Ion:180 Resp: 828  
Ion Ratio Lower Upper  
180 100  
182 113.4 76.5 114.7



#74  
Naphthalene  
Concen: 1.30 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

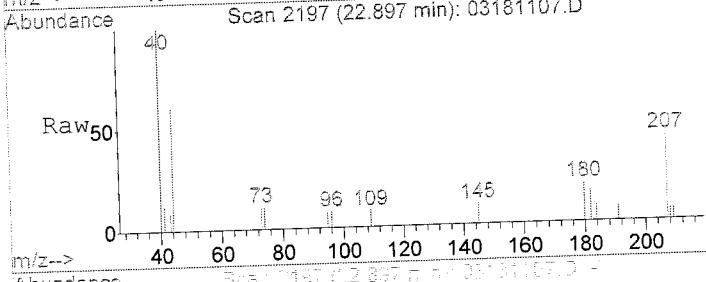
Tgt Ion:128 Resp: 8346



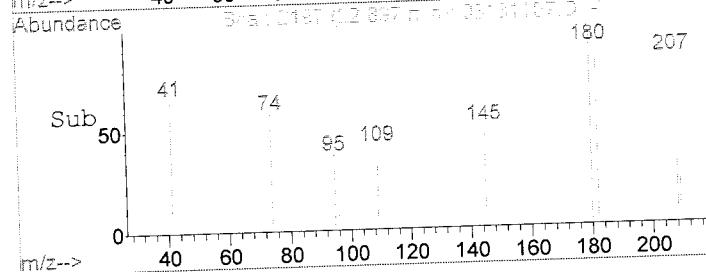
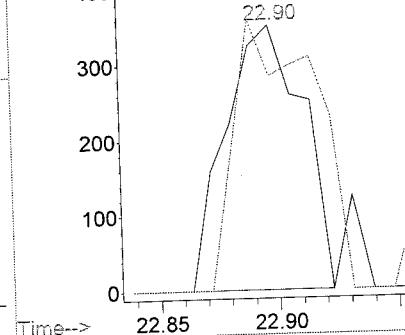


#76  
1,2,3-Trichlorobenzene  
Concen: 0.20 ug/L  
RT: 22.90 min Scan# 2197  
Delta R.T. 0.00 min  
Lab File: 03181107.D  
Acq: 18 Mar 2011 10:29 am

Tgt Ion:180 Resp: 793  
Ion Ratio Lower Upper  
180 100  
182 52.5 76.1 114.1#



Abundance Ion 180.00 (179.70 to 180.70):  
Ion 182.00 (181.70 to 182.70):



Sub

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181110.D Vial: 3  
 Acq On : 18 Mar 2011 12:01 pm Operator: LC  
 Sample : PUC0827-02 Inst : GCMS7  
 Misc : SOURCE Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 13:00 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	173163	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	306651	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	264627	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	119070	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	96676	22.19	ug/L	0.00
Spiked Amount 25.000			Recovery	=	88.76%	
39) Toluene-d8	14.11	98	343395	22.20	ug/L	0.00
Spiked Amount 25.000			Recovery	=	88.80%	
53) 4-Bromofluorobenzene	17.75	95	123364	21.27	ug/L	0.00
Spiked Amount 25.000			Recovery	=	85.08%	
<b>Target Compounds</b>						
5) Bromomethane	5.73	94	199	0.29	ug/L	NSM 92
8) Acetone	6.94	43	3295	Below Cal	124/ut	93
15) MTBE	8.73	73	847	0.09	ug/L	# 86
21) Chloroform	9.92	83	11200	1.20	ug/L	✓ 99
24) 1,2-Dichloroethane	10.59	62	787	0.14	ug/L	#1w2t 1
32) Trichloroethene	12.26	95	2110	0.40	ug/L	124/ut 96.5
42) 1,3-Dichloropropane	14.11	76	3460	0.58	ug/L	#1w2t 51
43) 2-Hexanone	14.44	43	187	0.09	ug/L	124/ut 29
46) Tetrachloroethene	15.20	166	8950	1.89	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03181110.D 031711.M Fri Mar 18 13:00:47 2011

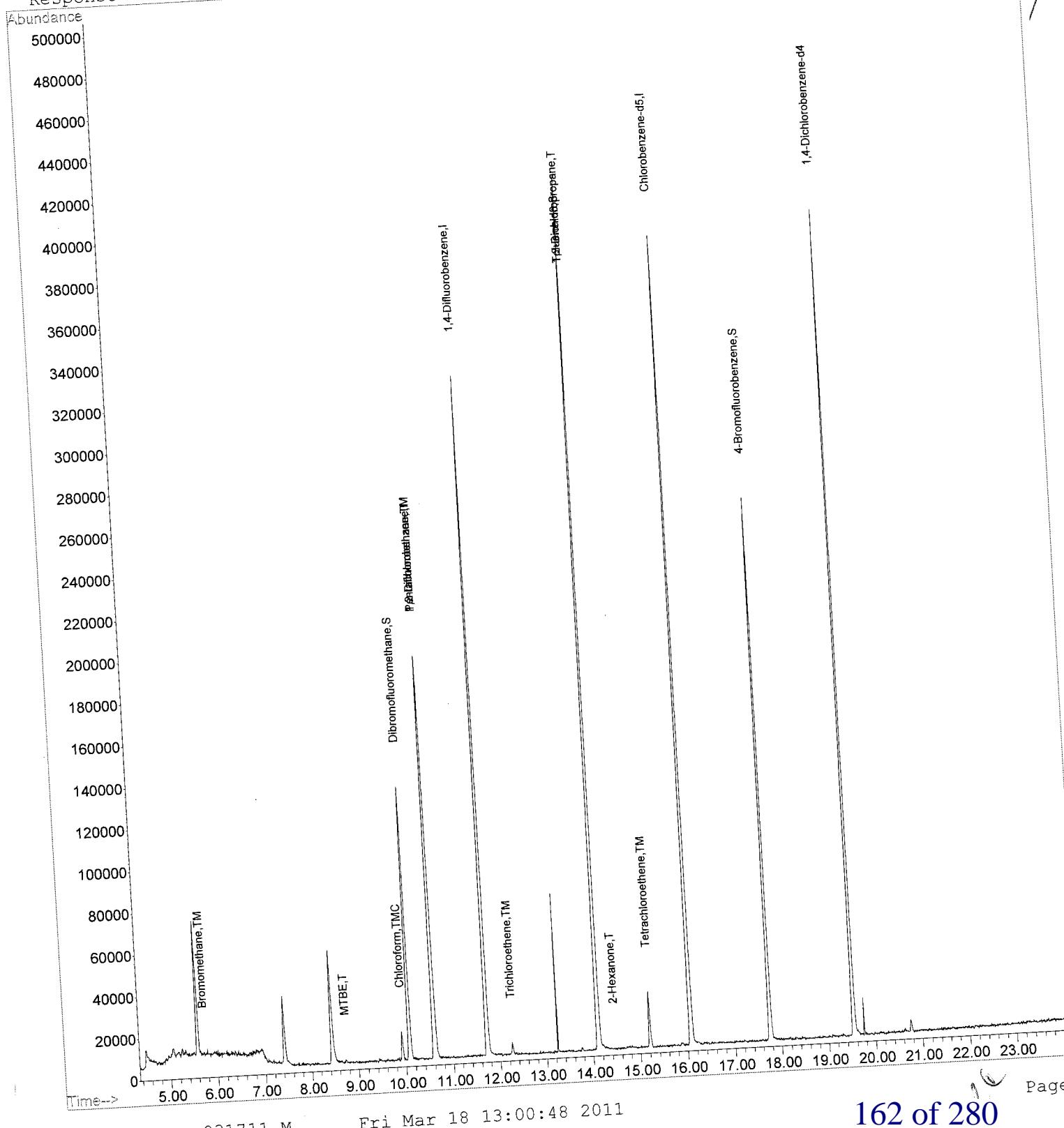
Quantitation Report

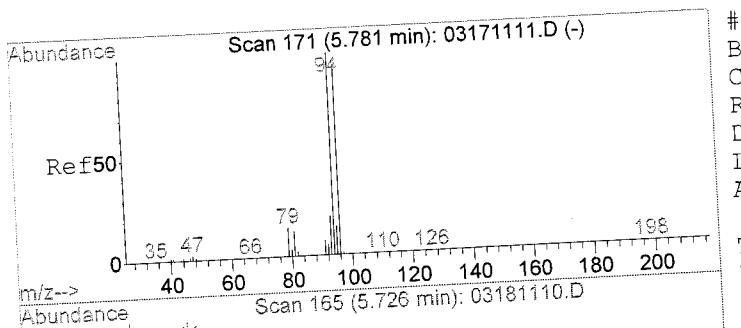
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 Acq On : 18 Mar 2011 12:01 pm  
 Sample : PUC0827-02  
 Misc : SOURCE  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011  
 Quant Results File: 031711.RES

Vial: 3  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

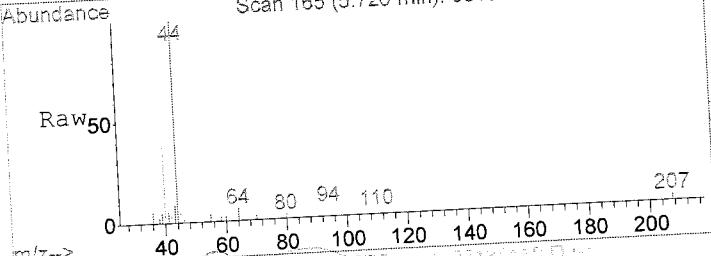
TIC: 03181110.D





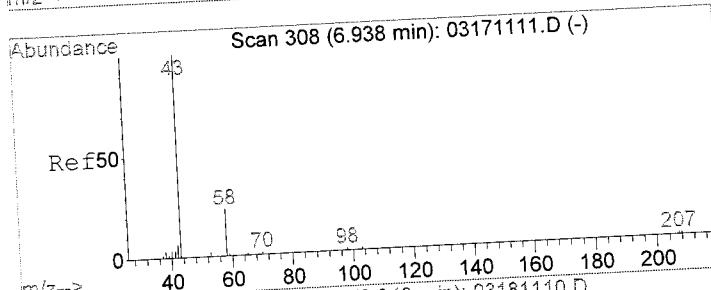
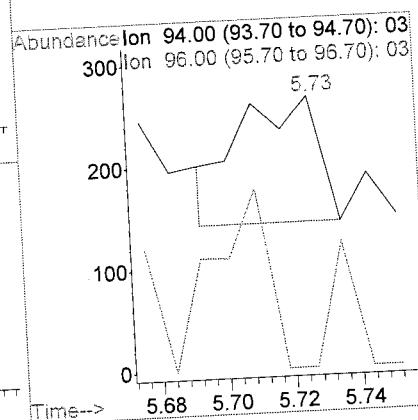
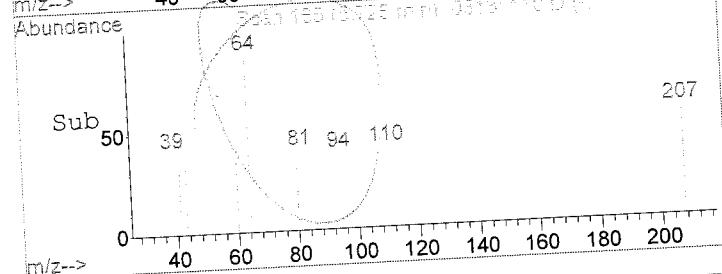
#5  
Bromomethane  
Concen: 0.29 ug/L  
RT: 5.73 min Scan# 165  
Delta R.T. -0.05 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

*WSM*



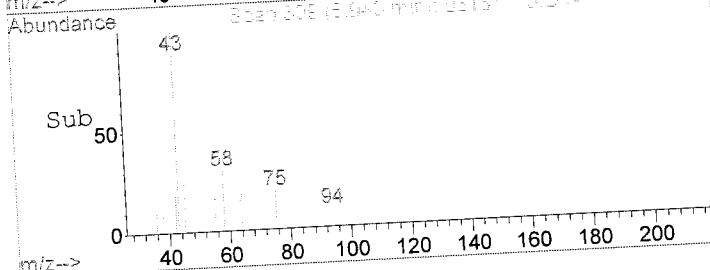
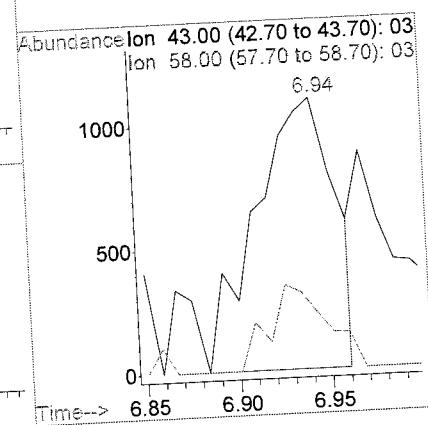
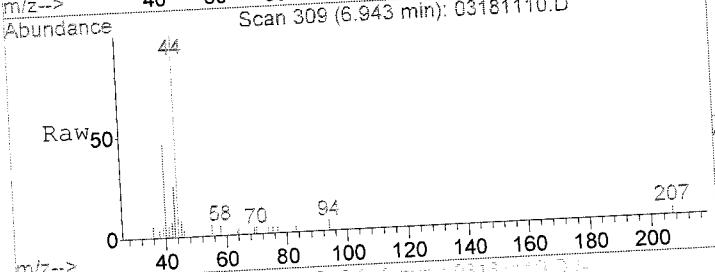
Tgt Ion: 94 Resp: 199  
Ion Ratio Lower Upper  
94 100  
96 100.5 74.0 111.0

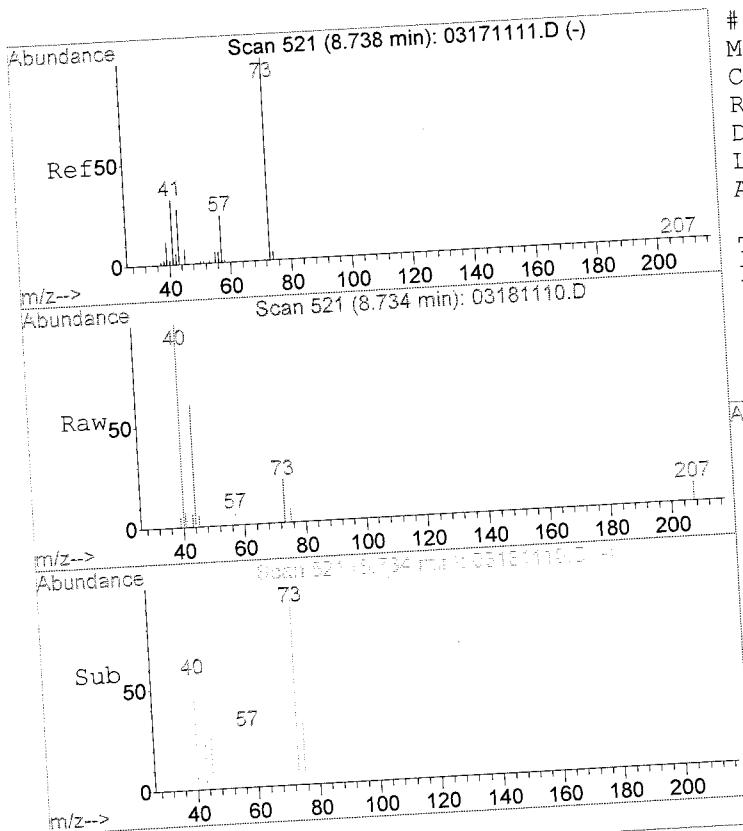
*7*



#8  
Acetone  
Concen: Below Cal  
RT: 6.94 min Scan# 309  
Delta R.T. 0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

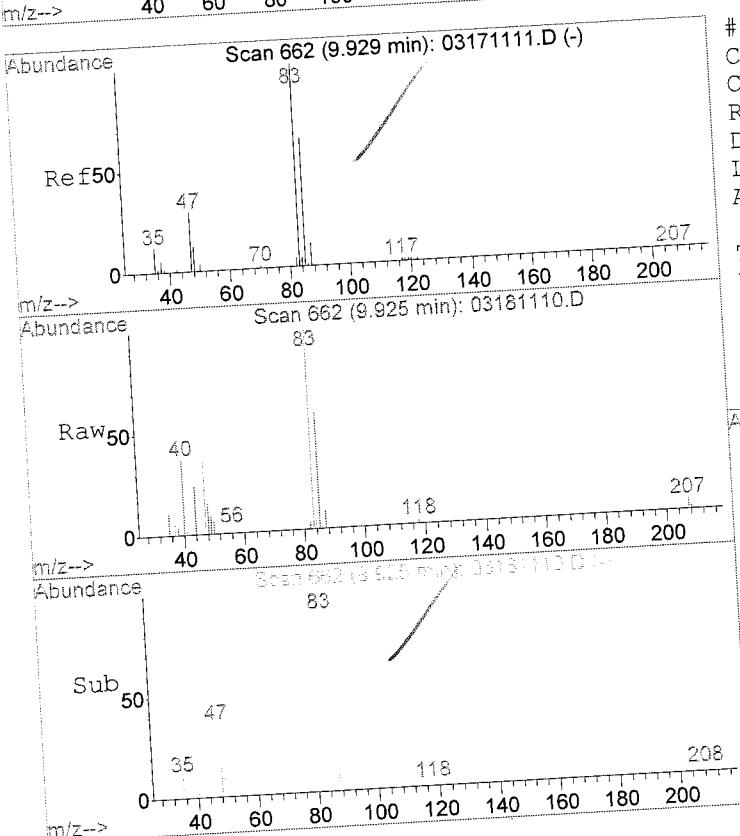
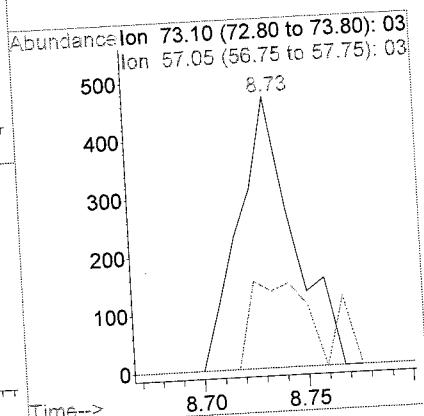
Tgt Ion: 43 Resp: 3295  
Ion Ratio Lower Upper  
43 100  
58 22.9 21.2 31.8





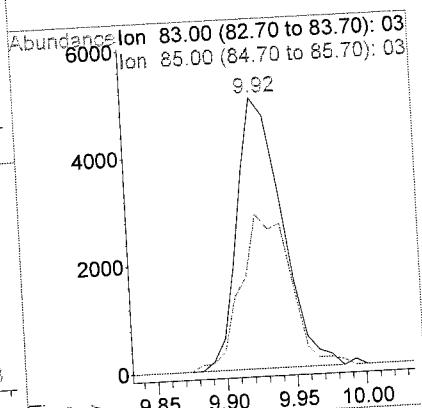
#15  
MTBE  
Concen: 0.09 ug/L  
RT: 8.73 min Scan# 521  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

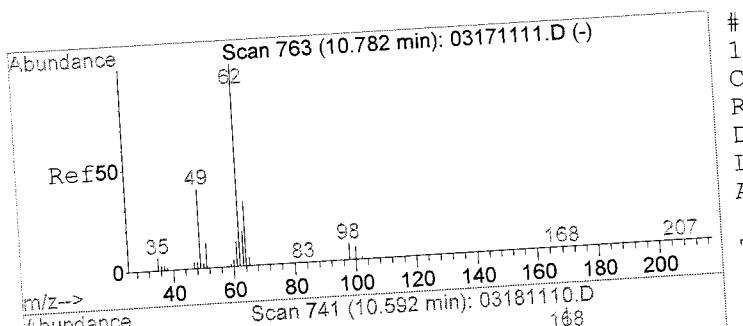
Tgt Ion: 73 Resp: 847  
Ion Ratio Lower Upper  
73 100  
57 31.9 20.0 30.0#



#21  
Chloroform  
Concen: 1.20 ug/L  
RT: 9.92 min Scan# 662  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

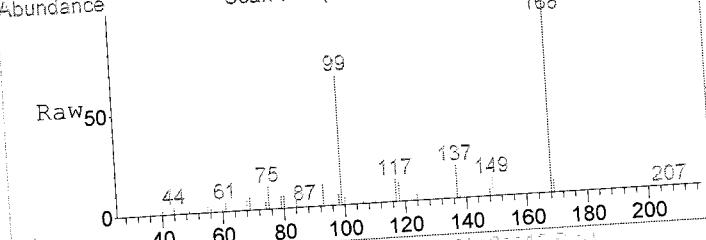
Tgt Ion: 83 Resp: 11200  
Ion Ratio Lower Upper  
83 100  
85 63.6 51.6 77.4



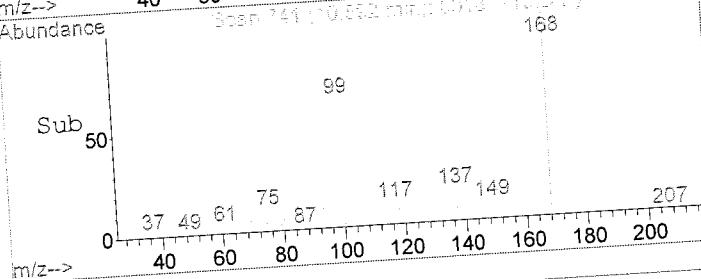
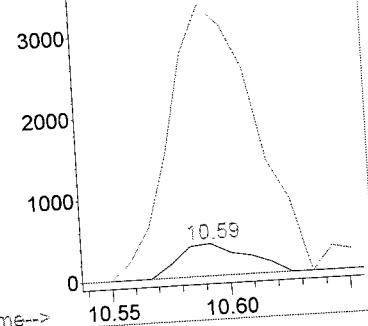


#24  
1,2-Dichloroethane  
Concen: 0.14 ug/L  
RT: 10.59 min Scan# 741  
Delta R.T. -0.19 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion: 62 Resp: 787  
Ion Ratio Lower Upper  
62 100  
98 1050.8 7.0 10.6#

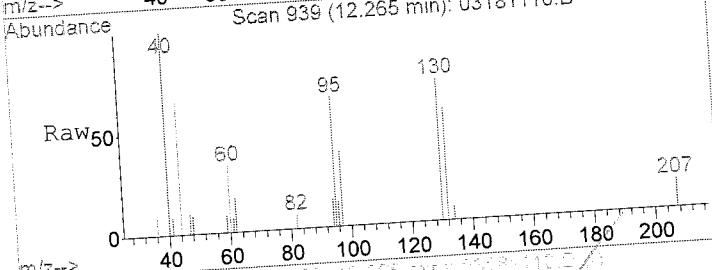


Abundance ion 62.00 (61.70 to 62.70): 03  
ion 98.00 (97.70 to 98.70): 03

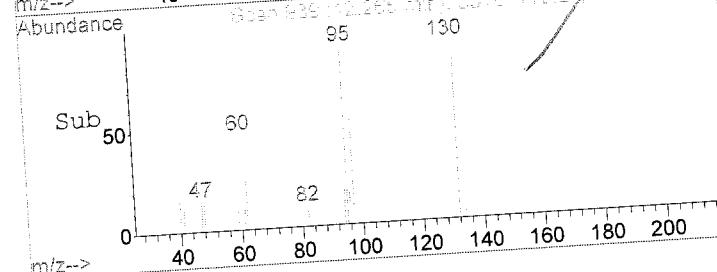
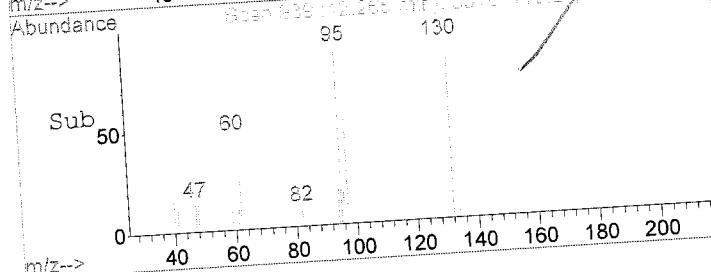
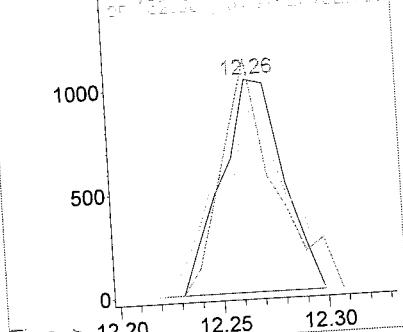


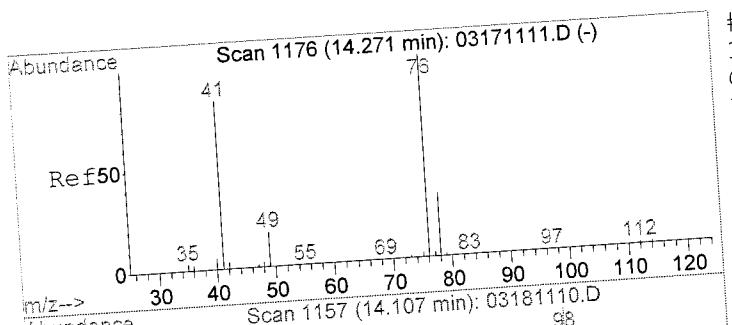
#32  
Trichloroethene  
Concen: 0.40 ug/L  
RT: 12.26 min Scan# 939  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion: 95 Resp: 2110  
Ion Ratio Lower Upper  
95 100  
130 94.0 74.2 111.4  
132 95.0 70.8 106.2



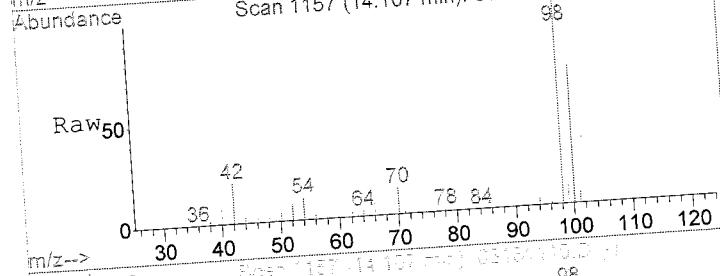
Abundance ion 95.00 (94.70 to 95.70): 03  
ion 130.00 (129.70 to 130.70): 03



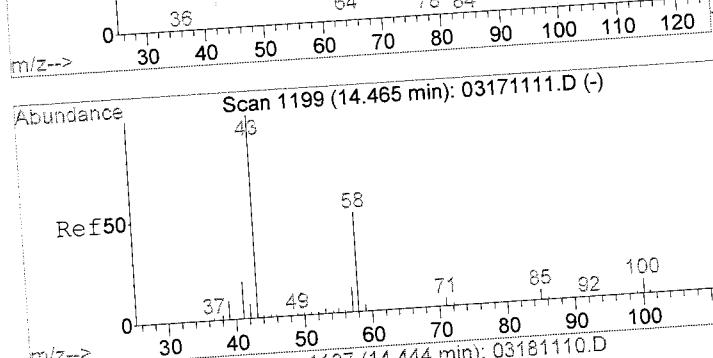
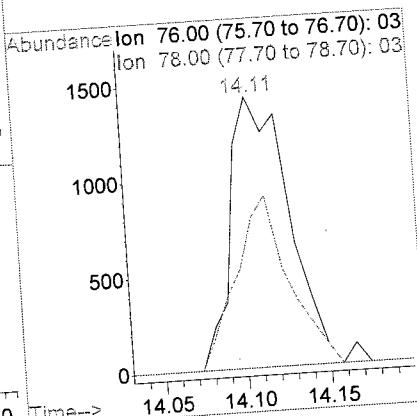


#42  
1,3-Dichloropropane  
Concen: 0.58 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

*✓*

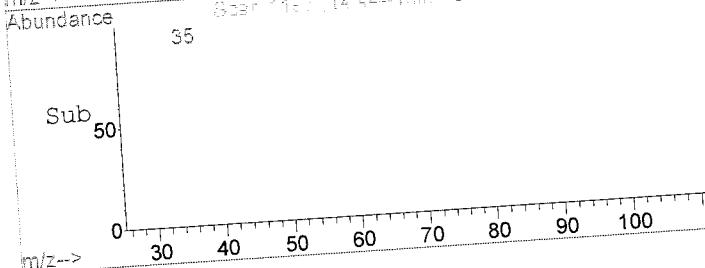
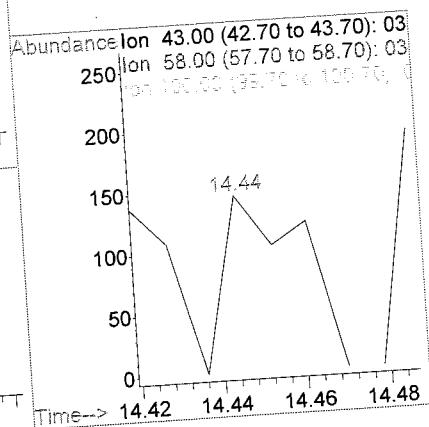
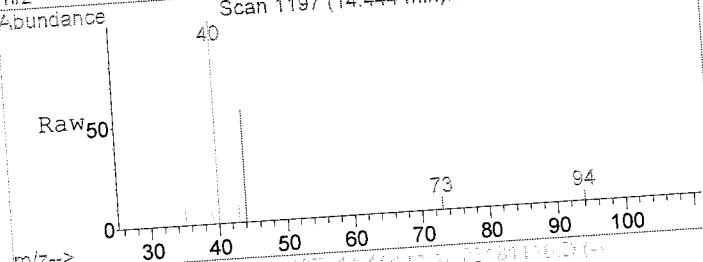


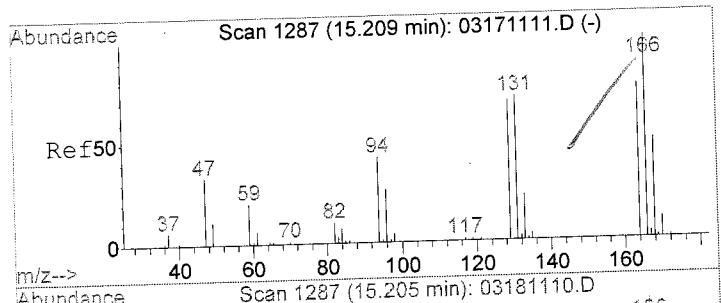
Tgt Ion: 76 Resp: 3460  
Ion Ratio Lower Upper  
76 100  
78 57.7 24.6 37.0#



#43  
2-Hexanone  
Concen: 0.09 ug/L  
RT: 14.44 min Scan# 1197  
Delta R.T. -0.02 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

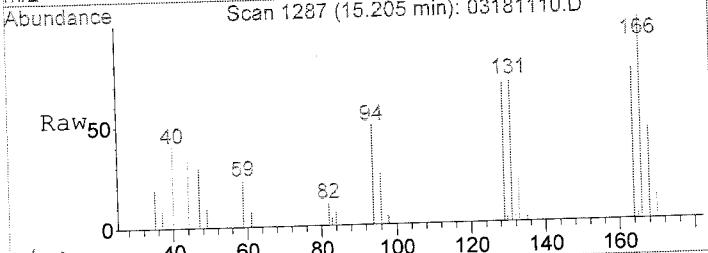
Tgt Ion: 43 Resp: 187  
Ion Ratio Lower Upper  
43 100  
58 0.0 38.2 57.4#  
100 0.0 0.0 0.0



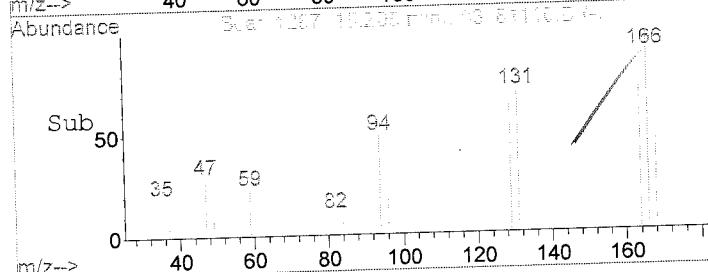
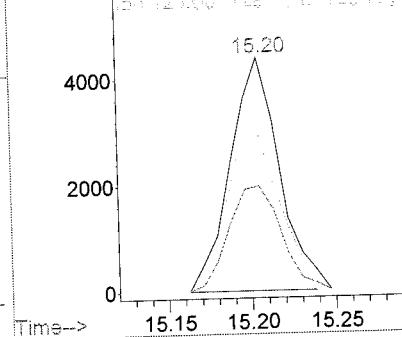


#46  
Tetrachloroethene  
Concen: 1.89 ug/L  
RT: 15.20 min Scan# 1287  
Delta R.T. -0.00 min  
Lab File: 03181110.D  
Acq: 18 Mar 2011 12:01 pm

Tgt Ion:166 Resp: 8950  
Ion Ratio Lower Upper  
166 100  
168 48.3 37.9 56.9  
129 75.0 59.8 89.8



Abundance Ion 166.00 (165.70 to 166.70):  
6000  
Ion 168.00 (167.70 to 168.70):  
6000



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D Vial: 4  
 Acq On : 18 Mar 2011 12:32 pm Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 13:00 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/21/11e

Internal Standards	R.T.	QIon	Response	Conc Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	175360	25.00 ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	309722	25.00 ug/L	0.00
41) Chlorobenzene-d5	16.07	117	259868	25.00 ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	120935	25.00 ug/L	0.00
System Monitoring Compounds					
23) Dibromofluoromethane	10.08	113	97936	22.20 ug/L	0.00
Spiked Amount 25.000			Recovery =	88.80%	
39) Toluene-d8	14.11	98	340219	21.78 ug/L	0.00
Spiked Amount 25.000			Recovery =	87.12%	
53) 4-Bromofluorobenzene	17.75	95	122265	21.47 ug/L	0.00
Spiked Amount 25.000			Recovery =	85.88%	
Target Compounds				Qvalue	
2) Dichlorodifluoromethane	4.59	85	187975	22.69 ug/L	98
3) Chloromethane	4.90	50	301362	22.00 ug/L	98
4) Vinyl chloride	5.18	62	286850	23.52 ug/L	99
5) Bromomethane	5.78	94	139537	22.00 ug/L	98
6) Chloroethane	5.98	64	157362	24.34 ug/L	97
7) Trichlorofluoromethane	6.77	101	229586	27.08 ug/L	99
8) Acetone	6.93	43	31918	31.17 ug/L	96
9) Iodomethane	7.57	142	139617	35.56 ug/L	100
10) 1,1-Dichloroethene	7.70	84	155716	26.83 ug/L	96
11) Methylene chloride	7.77	101	154689	26.42 ug/L	99
12) Freon 113	8.02	76	536186	30.47 ug/L	100
13) Carbon disulfide	8.60	96	122531	22.39 ug/L	96
14) trans-1,2-Dichloroethene	8.73	73	208246	22.27 ug/L	99
15) MTBE	8.92	63	250145	21.91 ug/L	99
16) 1,1-Dichloroethane	9.08	43	248788	28.06 ug/L	100
17) Vinyl acetate	9.47	72	7031	25.64 ug/L	62
18) 2-Butanone (MEK)	9.66	96	122924	21.69 ug/L	99
19) cis-1,2-Dichloroethene	9.87	128	46868	22.60 ug/L	98
20) Bromochloromethane	9.93	83	216682	23.00 ug/L	99
21) Chloroform	10.03	77	168655	22.08 ug/L	99
22) 2,2-Dichloropropane	10.78	62	131737	22.92 ug/L	98
24) 1,2-Dichloroethane	10.90	97	153677	22.72 ug/L	99
25) 1,1,1-Trichloroethane	11.15	75	178152	22.47 ug/L	99
27) 1,1-Dichloropropene	11.39	117	125329	22.90 ug/L	99
28) Carbon tetrachloride	11.44	78	457253	21.57 ug/L	99
29) Benzene	12.16	93	58309	23.25 ug/L	99
30) Dibromomethane	12.21	63	134198	22.67 ug/L	99
31) 1,2-Dichloropropane	12.26	95	116844	22.04 ug/L	98
32) Trichloroethene	12.32	83	139583	22.43 ug/L	98
33) Bromodichloromethane	13.16	63	909	Below Cal #	55
34) 2-Chlorovinylethylether	13.16	75	170102	22.52 ug/L	100
35) cis-1,3-Dichloropropene	13.16	43	77496	25.05 ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	75	143203	24.57 ug/L	100
37) trans-1,3-Dichloropropene	13.73	83	63997	22.83 ug/L	99
38) 1,1,2-Trichloroethane	13.95	92	259965	21.57 ug/L	100
40) Toluene	14.21	76	134444	22.86 ug/L	97
42) 1,3-Dichloropropane	14.27				

(#) = qualifier out of range (m) = manual integration  
 (#) = 03181111.D 031711.M Fri Mar 18 13:01:08 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D Vial: 4  
 Acq On : 18 Mar 2011 12:32 pm Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 13:00 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : USEPA Method 8260B  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	50509	25.76	ug/L	# 93
44) Dibromochloromethane	14.65	129	80218	22.69	ug/L	99
45) 1,2-Dibromoethane	14.98	107	69348	23.49	ug/L	98
46) Tetrachloroethene	15.20	166	111131	23.84	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	84525	21.96	ug/L	99
48) Chlorobenzene	16.12	112	265370	21.73	ug/L	99
49) Ethylbenzene	16.38	91	501400	21.79	ug/L	99
50) m,p-Xylenes	16.64	106	175688	21.80	ug/L	100
51) Styrene	17.09	104	261644	21.41	ug/L	100
52) o-Xylene	17.19	106	168774	21.54	ug/L	98
55) Bromoform	16.81	173	41647	23.78	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	84105	23.75	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	17541	22.77	ug/L	92
58) Isopropylbenzene	17.69	105	460294	24.86	ug/L	100
59) Bromobenzene	18.05	156	97907	22.92	ug/L	98
60) n-Propylbenzene	18.30	91	615806	23.29	ug/L	99
61) 2-Chlorotoluene	18.44	91	335850	21.68	ug/L	99
62) 4-Chlorotoluene	18.55	91	346950	22.60	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	365742	22.86	ug/L	99
64) tert-Butylbenzene	19.09	119	308158	22.62	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	375578	23.35	ug/L	99
66) sec-Butylbenzene	19.38	105	527950	22.61	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	198093	22.75	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	197959	22.59	ug/L	99
69) p-Isopropyltoluene	19.61	119	416242	23.32	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	172866	22.83	ug/L	100
71) n-Butylbenzene	20.11	91	466267	23.47	ug/L	90
72) 1,2-Dibromo-3-chloropropan	20.58	157	10925	23.15	ug/L	97
73) 1,2,4-Trichlorobenzene	22.28	180	124221	25.40	ug/L	100
74) Naphthalene	22.62	128	153258	23.63	ug/L	98
75) Hexachlorobutadiene	22.68	225	74012	23.70	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100939	25.32	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03181111.D 031711.M Fri Mar 18 13:01:09 2011

Quantitation Report

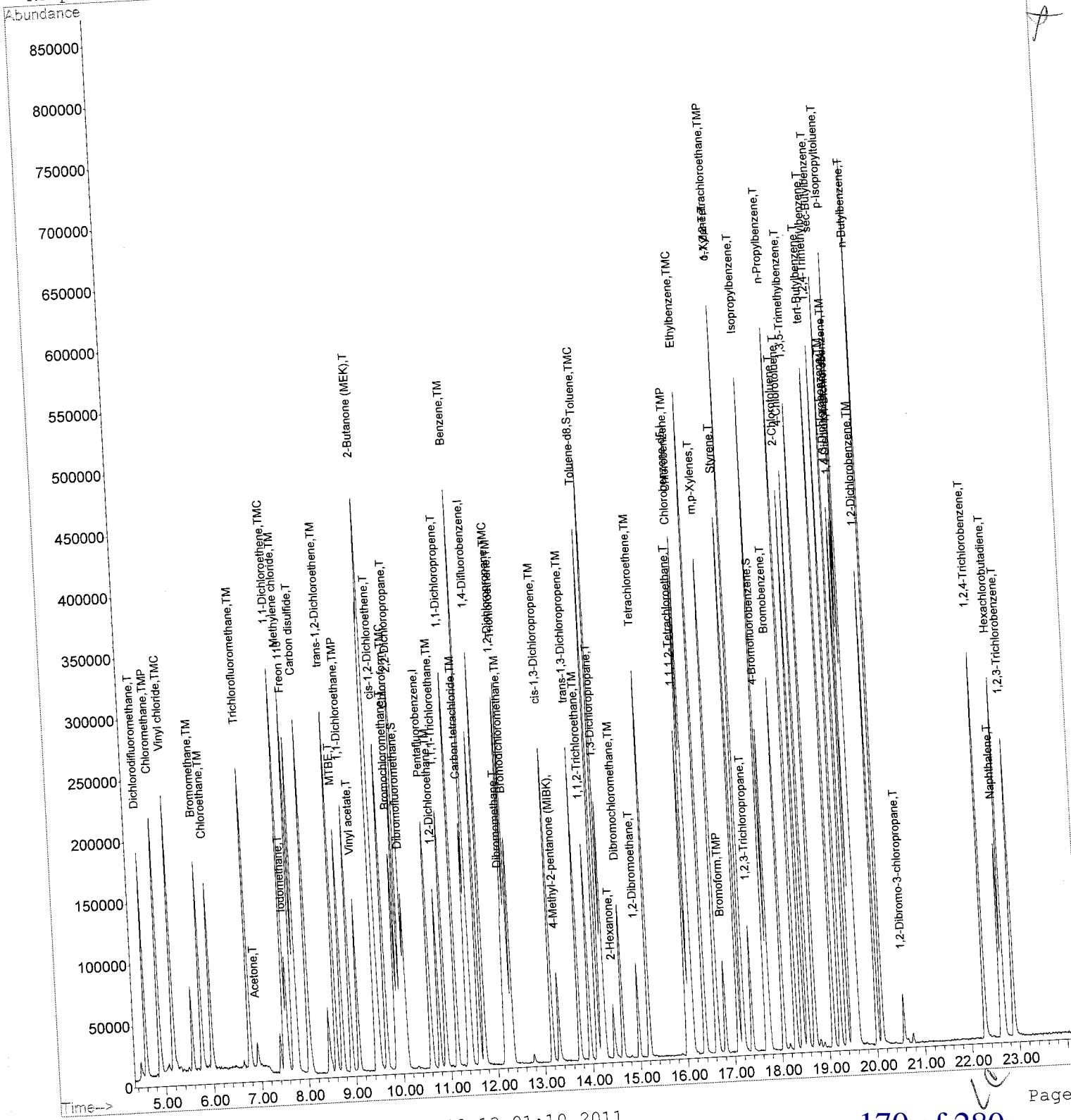
Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181111.D  
 Acq On : 18 Mar 2011 12:32 pm  
 Sample : -MS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:00 2011

Vial: 4  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03181111.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D  
 Acq On : 18 Mar 2011 1:03 pm  
 Sample : -MSD1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:29 2011

Vial: 5  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	179999	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	308727	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	259846	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	122755	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	98275	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.80%		
39) Toluene-d8	14.12	98	339563	21.81	ug/L	0.00
Spiked Amount 25.000			Recovery =	87.24%		
53) 4-Bromofluorobenzene	17.75	95	123469	21.68	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.72%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	189026	22.23	ug/L	98
3) Chloromethane	4.89	50	280199	19.93	ug/L	100
4) Vinyl chloride	5.18	62	290234	23.19	ug/L	99
5) Bromomethane	5.78	94	142471	21.89	ug/L	98
6) Chloroethane	5.98	64	148632	22.40	ug/L	98
7) Trichlorofluoromethane	6.78	101	223545	25.68	ug/L	99
8) Acetone	6.93	43	28585	26.69	ug/L	100
9) Iodomethane	7.51	96	108745	21.42	ug/L	98
10) 1,1-Dichloroethene	7.71	84	127291	21.31	ug/L	98
11) Methylene chloride	7.77	101	122604	20.40	ug/L	100
12) Freon 113	8.03	76	455298	25.21	ug/L	95
13) Carbon disulfide	8.59	96	123701	22.02	ug/L	99
14) trans-1,2-Dichloroethene	8.74	73	207884	21.66	ug/L	99
15) MTBE	8.92	63	251313	21.45	ug/L	100
16) 1,1-Dichloroethane	9.07	43	239938	26.36	ug/L	70
17) Vinyl acetate	9.47	72	6935	24.67	ug/L	99
18) 2-Butanone (MEK)	9.66	96	119845	20.60	ug/L	97
19) cis-1,2-Dichloroethene	9.87	128	46876	22.02	ug/L	98
20) Bromochloromethane	9.93	83	219139	22.66	ug/L	99
21) Chloroform	10.04	77	169285	21.59	ug/L	99
22) 2,2-Dichloropropane	10.78	62	129227	21.90	ug/L	99
24) 1,2-Dichloroethane	10.91	97	154978	22.32	ug/L	99
25) 1,1,1-Trichloroethane	11.14	75	178745	22.62	ug/L	100
27) 1,1-Dichloropropene	11.39	117	127059	23.29	ug/L	98
28) Carbon tetrachloride	11.44	78	457901	21.67	ug/L	97
29) Benzene	12.17	93	57214	22.89	ug/L	99
30) Dibromomethane	12.21	63	133921	22.69	ug/L	99
31) 1,2-Dichloropropane	12.27	95	119509	22.62	ug/L	100
32) Trichloroethene	12.33	83	140177	22.60	ug/L	# 55
33) Bromodichloromethane	13.16	63	725	Below Cal		100
34) 2-Chlorovinylethylether	13.16	75	172442	22.90	ug/L	98
35) cis-1,3-Dichloropropene	13.16	43	75831	24.59	ug/L	99
36) 4-Methyl-2-pantanone (MIBK)	13.31	75	138227	23.79	ug/L	98
37) trans-1,3-Dichloropropene	13.73	83	63003	22.55	ug/L	98
38) 1,1,2-Trichloroethane	13.95	92	266163	22.16	ug/L	98
40) Toluene	14.21	76	131001	22.28	ug/L	95
42) 1,3-Dichloropropane	14.27					

(m) = manual integration  
 (#) = qualifier out of range  
 03181112.D 031711.M Fri Mar 18 13:29:58 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D Vial: 5  
 Acq On : 18 Mar 2011 1:03 pm Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 13:29 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	49246	25.12	ug/L	# 98
44) Dibromochloromethane	14.64	129	79561	22.50	ug/L	96
45) 1,2-Dibromoethane	14.98	107	67250	22.78	ug/L	99
46) Tetrachloroethene	15.20	166	112766	24.20	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	86251	22.41	ug/L	98
48) Chlorobenzene	16.12	112	270123	22.12	ug/L	99
49) Ethylbenzene	16.37	91	506089	22.00	ug/L	100
50) m,p-Xylenes	16.63	106	177078	21.97	ug/L	100
51) Styrene	17.09	104	261153	21.37	ug/L	98
52) o-Xylene	17.19	106	168504	21.51	ug/L	100
55) Bromoform	16.81	173	42168	23.72	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	84237	23.44	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	18780	24.02	ug/L	98
58) Isopropylbenzene	17.69	105	469842	25.00	ug/L	99
59) Bromobenzene	18.05	156	99366	22.91	ug/L	97
60) n-Propylbenzene	18.30	91	628253	23.41	ug/L	99
61) 2-Chlorotoluene	18.44	91	345734	21.99	ug/L	100
62) 4-Chlorotoluene	18.55	91	355752	22.83	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	370004	22.78	ug/L	98
64) tert-Butylbenzene	19.08	119	312483	22.60	ug/L	100
65) 1,2,4-Trimethylbenzene	19.24	105	379550	23.25	ug/L	99
66) sec-Butylbenzene	19.38	105	534380	22.55	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	198554	22.47	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	199248	22.40	ug/L	99
69) p-Isopropyltoluene	19.61	119	416861	23.01	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	171131	22.27	ug/L	99
71) n-Butylbenzene	20.12	91	471564	23.39	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11516	24.04	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	123413	24.86	ug/L	100
74) Naphthalene	22.62	128	162045	24.62	ug/L	100
75) Hexachlorobutadiene	22.68	225	74980	23.65	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100253	24.77	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03181112.D 031711.M Fri Mar 18 13:29:58 2011

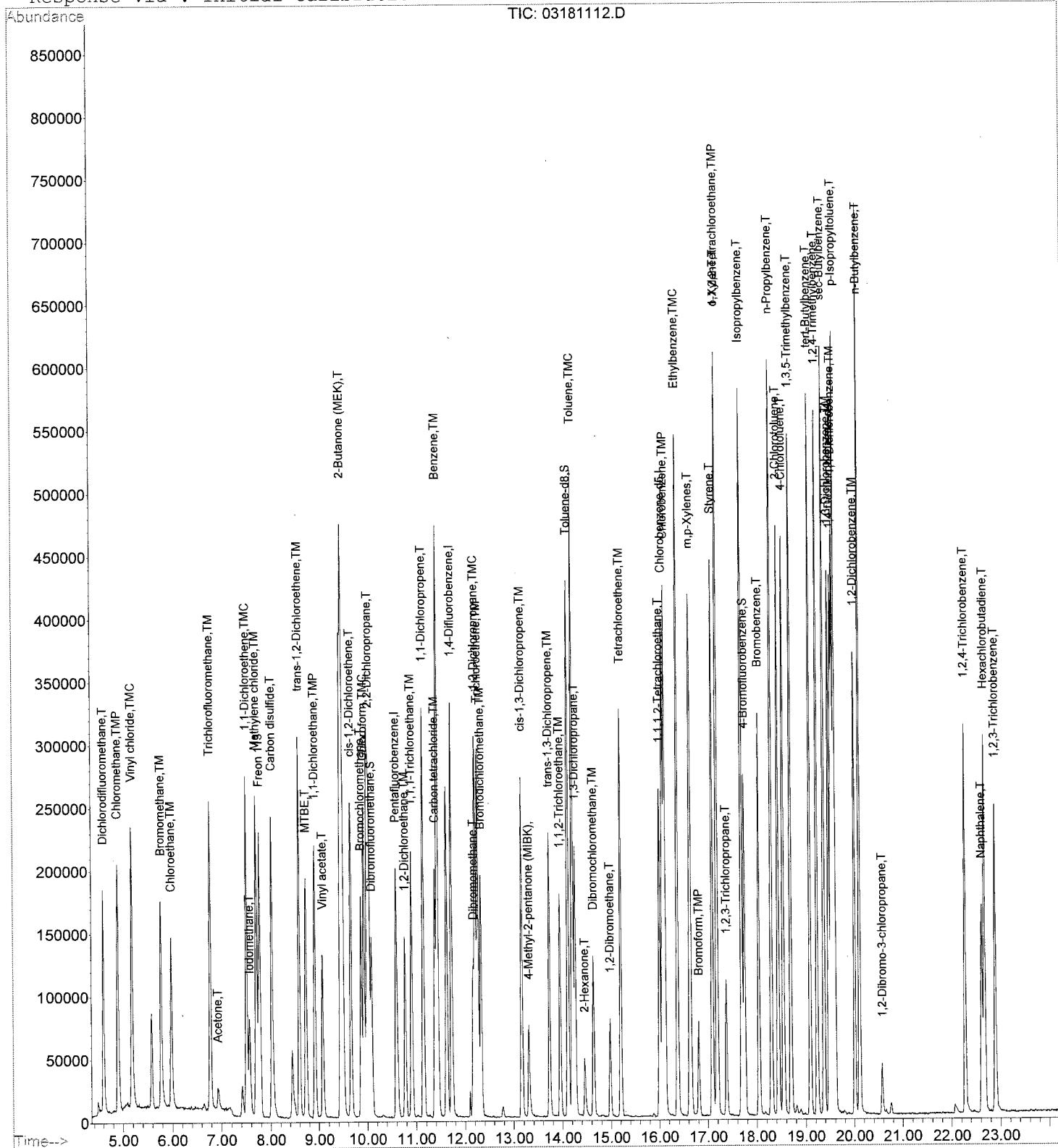
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181112.D Vial: 5  
Acq On : 18 Mar 2011 1:03 pm Operator: LC  
Sample : -MSD1 Inst : GCMS7  
Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 13:29 2011

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031811\03181121.D Vial: 13  
 Acq On : 18 Mar 2011 5:40 pm Operator: LC  
 Sample : PUC0829-01 Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 21 6:50 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator) 13/21/12  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	174737	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	303657	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	251558	25.00	ug/L	0.01
54) 1,4-Dichlorobenzene-d4	19.54	152	117440	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	95782	21.78	ug/L	0.00
Spiked Amount 25.000			Recovery	=	87.12%	
39) Toluene-d8	14.12	98	331155	21.62	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.48%	
53) 4-Bromofluorobenzene	17.76	95	116288	21.09	ug/L	0.00
Spiked Amount 25.000			Recovery	=	84.36%	
<b>Target Compounds</b>						
3) Chloromethane	4.91	50	5040	0.37	ug/L	Lev/nr 100
5) Bromomethane	5.78	94	227	0.29	ug/L	92
7) Trichlorofluoromethane	6.78	101	3112	0.37	ug/L	99
8) Acetone	6.94	43	6047	2.73	ug/L	96
10) 1,1-Dichloroethene	7.51	96	2281	0.46	ug/L	96
15) MTBE	8.74	73	3581	0.38	ug/L	# 80
16) 1,1-Dichloroethane	8.93	63	3239	0.28	ug/L	# 82
17) Vinyl acetate	9.11	43	2821	0.32	ug/L	# 83
19) cis-1,2-Dichloroethene	9.67	96	20270	3.59	ug/L	98
21) Chloroform	9.93	83	4421	0.47	ug/L	Lev/nr 93
24) 1,2-Dichloroethane	10.79	62	1352	0.24	ug/L	# 76
32) Trichloroethene	12.27	95	150063	28.88	ug/L	98
36) 4-Methyl-2-pentanone (MIBK	13.31	43	768	0.25	ug/L	# 50
38) 1,1,2-Trichloroethane	13.96	83	406	0.15	ug/L	# 77
40) Toluene	14.22	92	3391	0.29	ug/L	94
42) 1,3-Dichloropropane	14.28	76	1292	0.23	ug/L	96
43) 2-Hexanone	14.50	43	772	0.41	ug/L	# 71
46) Tetrachloroethene	15.21	166	4364	0.97	ug/L	95
50) m,p-Xylenes	16.66	106	1073	0.14	ug/L	Lev/nr 75
56) 1,1,2,2-Tetrachloroethane	17.19	83	473	0.14	ug/L	# 49
57) 1,2,3-Trichloropropane	17.40	110	131	0.18	ug/L	# 27
70) 1,2-Dichlorobenzene	20.01	146	845	0.11	ug/L	86
73) 1,2,4-Trichlorobenzene	22.30	180	1124	0.24	ug/L	83
74) Naphthalene	22.64	128	2310	0.37	ug/L	100
76) 1,2,3-Trichlorobenzene	22.91	180	1282	0.33	ug/L	90

(#) = qualifier out of range (m) = manual integration  
 03181121.D 031711.M Mon Mar 21 06:50:49 2011

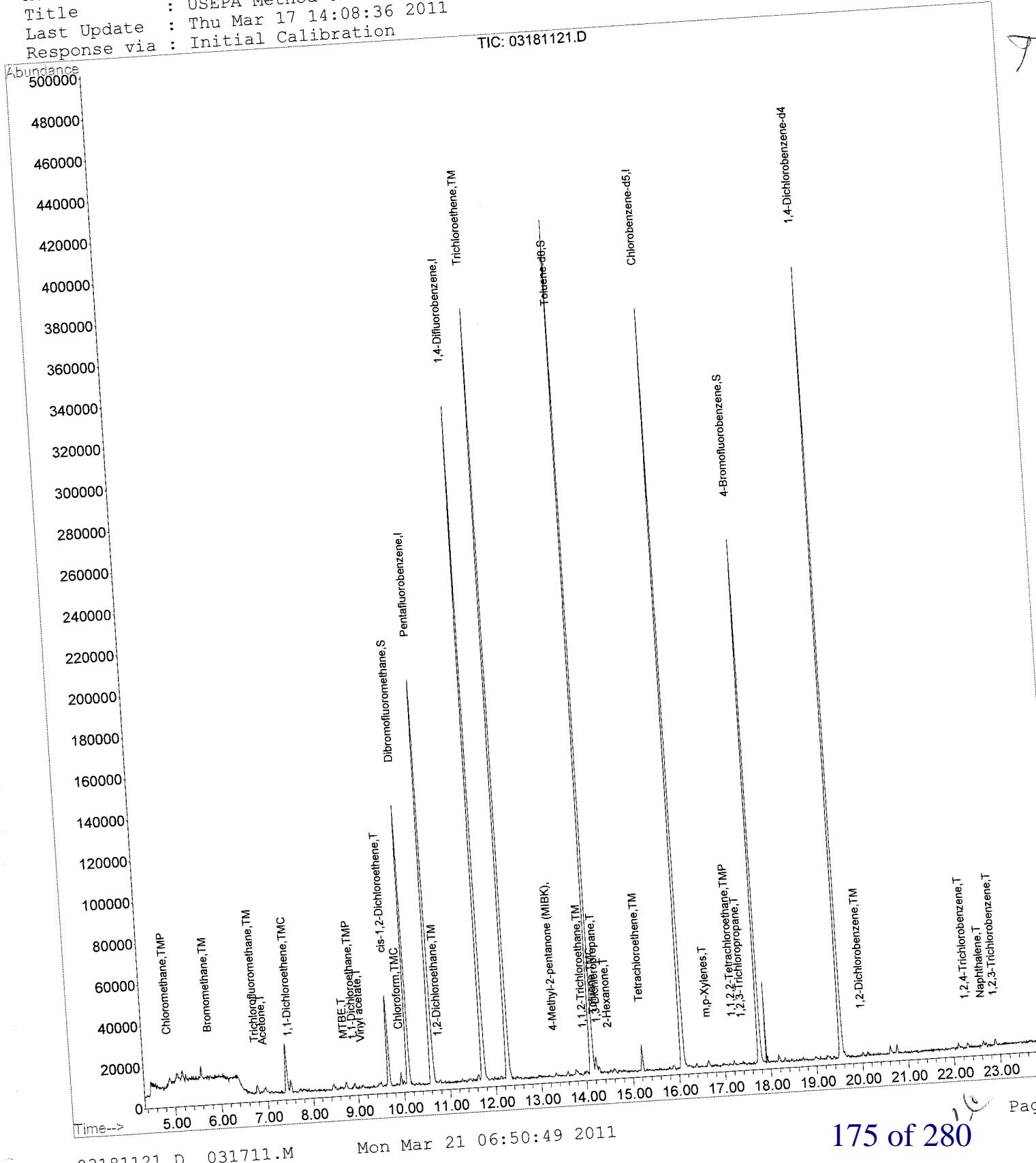
Quantitation Report

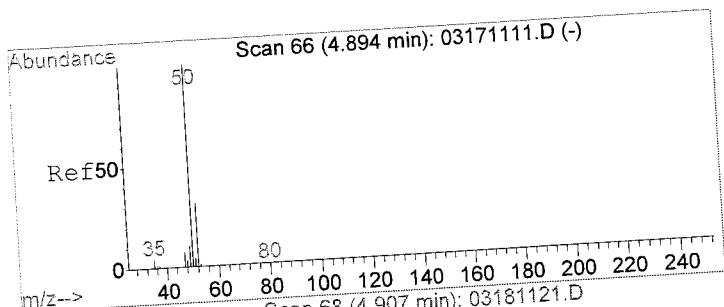
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 Acq On : 18 Mar 2011 5:40 pm  
 Sample : PUC0829-01  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 21 6:50 2011  
 Quant Results File: 031711.RES

Vial: 13  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03181121.D

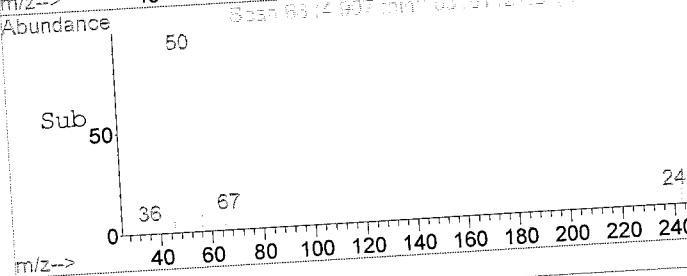
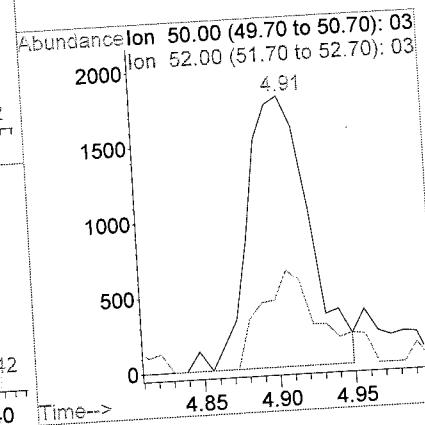
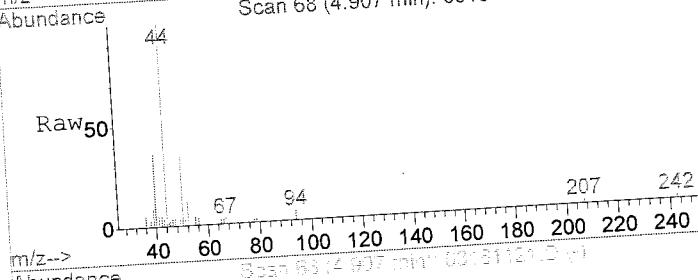




#3  
Chloromethane  
Concen: 0.37 ug/L  
RT: 4.91 min Scan# 68  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

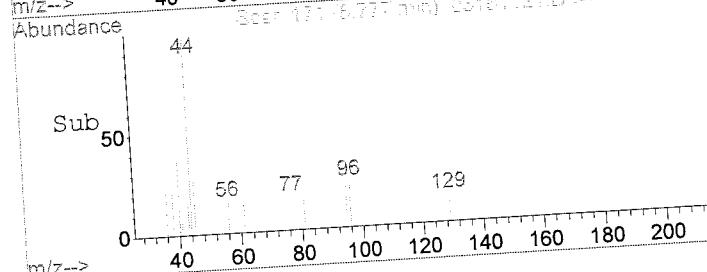
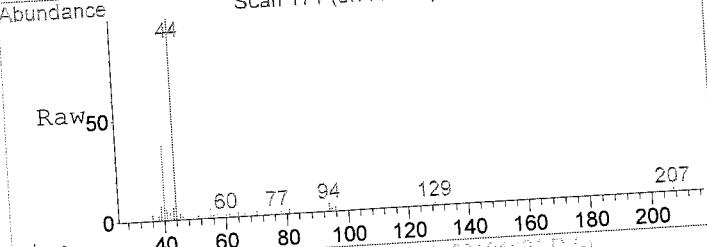
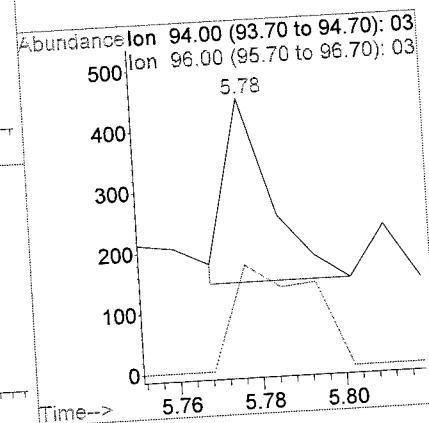
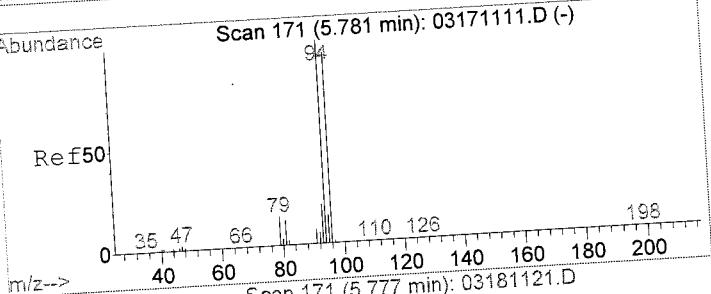
Tgt Ion: 50 Resp: 5040  
Ion Ratio Lower Upper  
50 100  
52 31.6 25.1 37.7

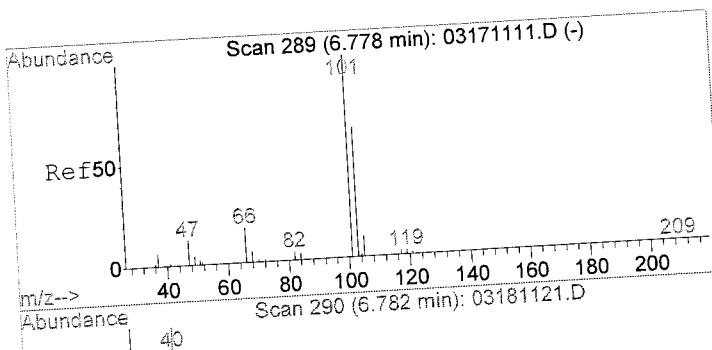
7



#5  
Bromomethane  
Concen: 0.29 ug/L  
RT: 5.78 min Scan# 171  
Delta R.T. -0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

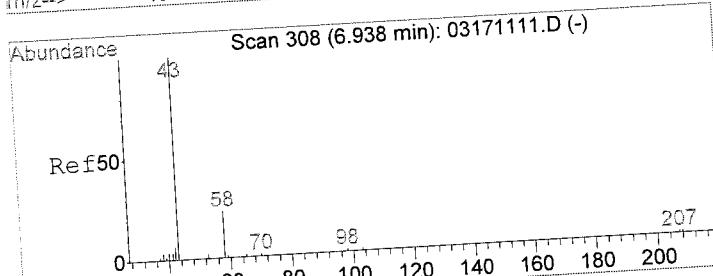
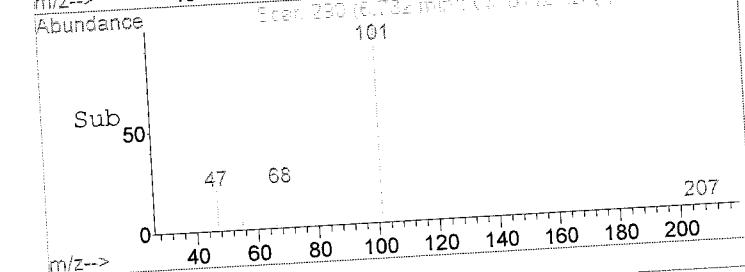
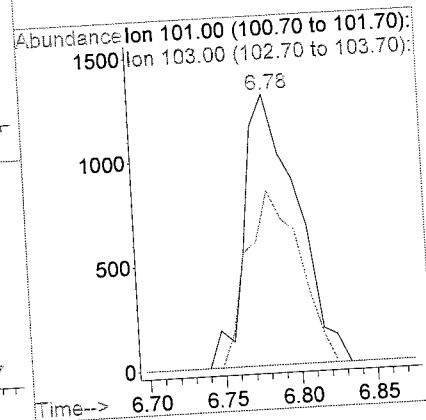
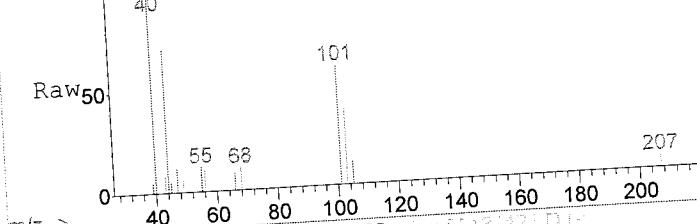
Tgt Ion: 94 Resp: 227  
Ion Ratio Lower Upper  
94 100  
96 100.0 74.0 111.0





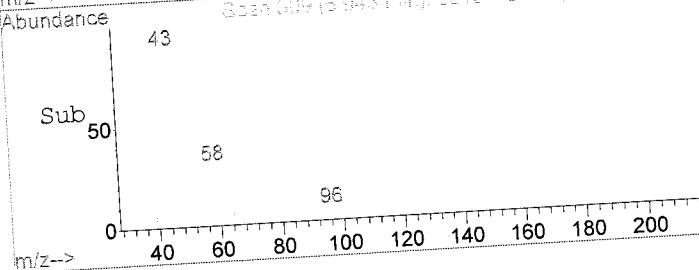
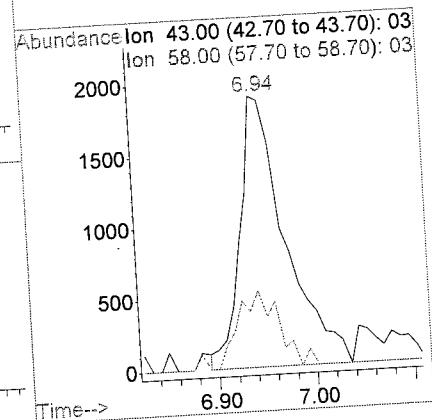
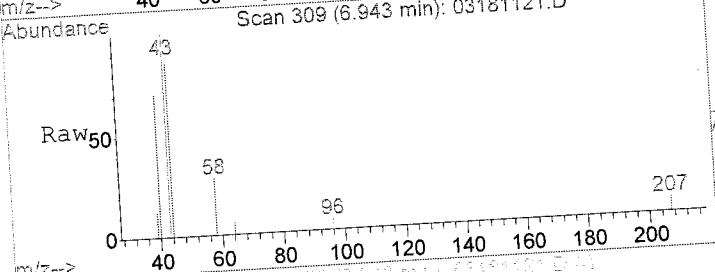
#7  
 Trichlorofluoromethane  
 Concen: 0.37 ug/L  
 RT: 6.78 min Scan# 290  
 Delta R.T. 0.00 min  
 Lab File: 03181121.D  
 Acq: 18 Mar 2011 5:40 pm

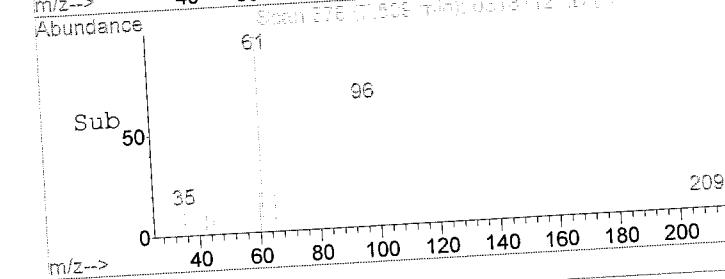
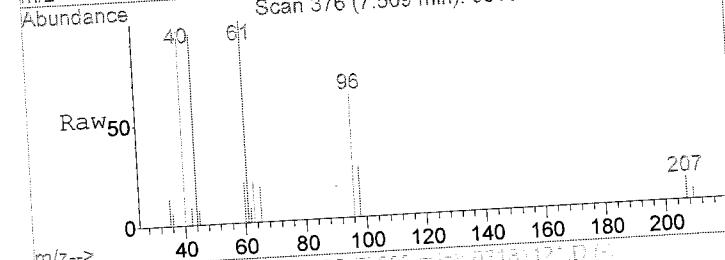
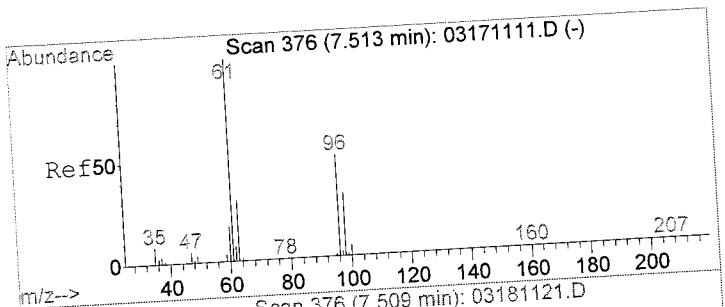
Tgt Ion: 101 Resp: 3112  
 Ion Ratio Lower Upper  
 101 100  
 103 64.5 50.7 76.1



#8  
 Acetone  
 Concen: 2.73 ug/L  
 RT: 6.94 min Scan# 309  
 Delta R.T. 0.00 min  
 Lab File: 03181121.D  
 Acq: 18 Mar 2011 5:40 pm

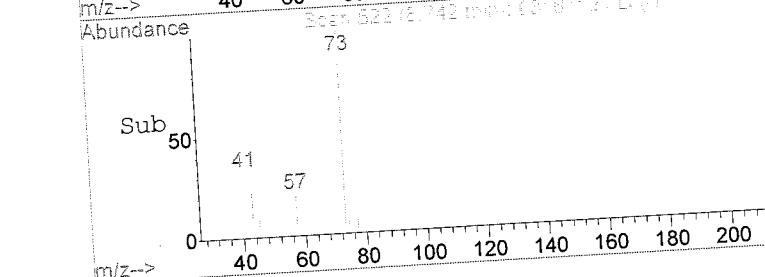
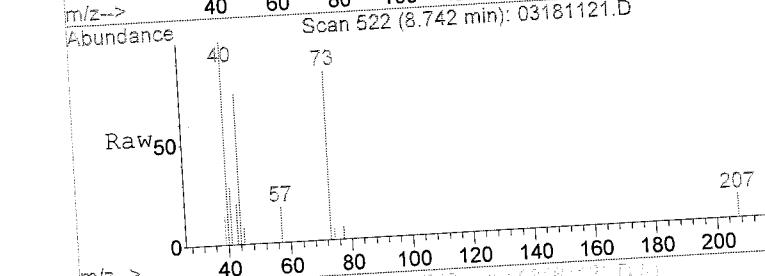
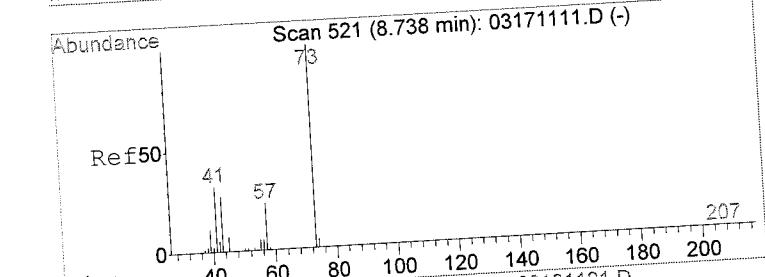
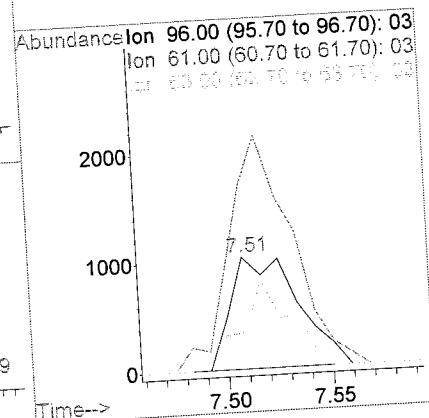
Tgt Ion: 43 Resp: 6047  
 Ion Ratio Lower Upper  
 43 100  
 58 24.4 21.2 31.8





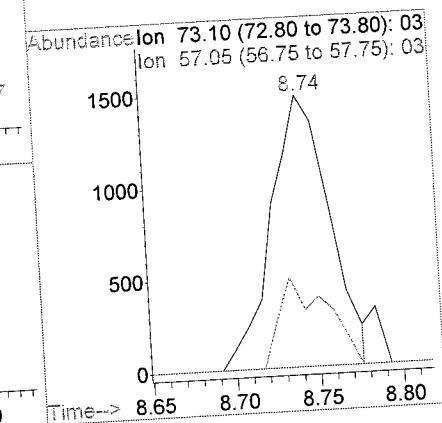
#10  
1,1-Dichloroethene  
Concen: 0.46 ug/L  
RT: 7.51 min Scan# 376  
Delta R.T. -0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

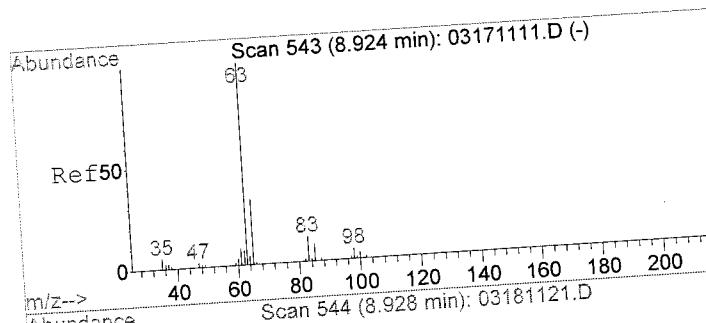
Tgt Ion: 96 Resp: 2281  
Ion Ratio Lower Upper  
96 100  
61 195.5 160.7 241.1  
63 60.4 50.9 76.3



#15  
MTBE  
Concen: 0.38 ug/L  
RT: 8.74 min Scan# 522  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

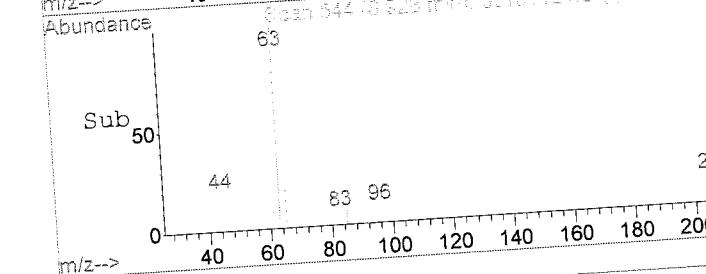
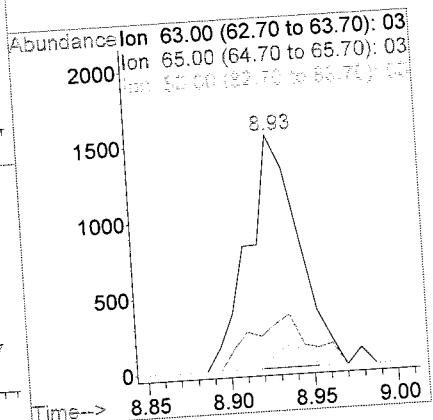
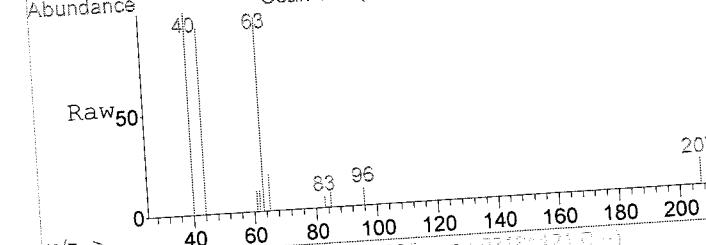
Tgt Ion: 73 Resp: 3581  
Ion Ratio Lower Upper  
73 100  
57 14.9 20.0 30.0#





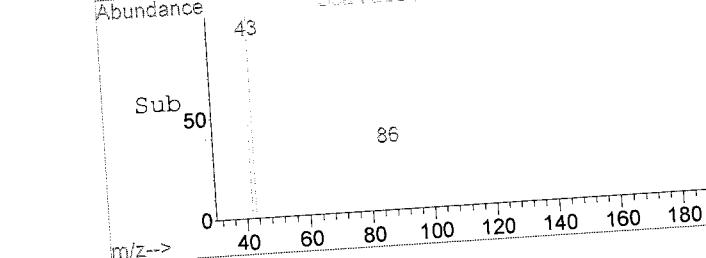
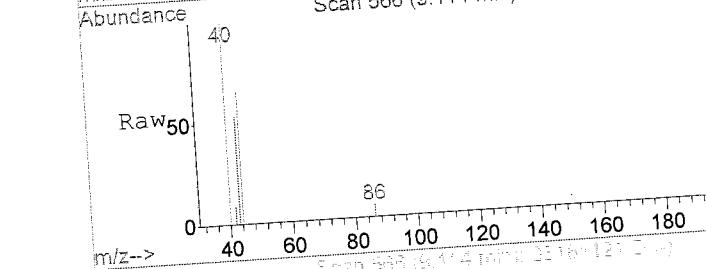
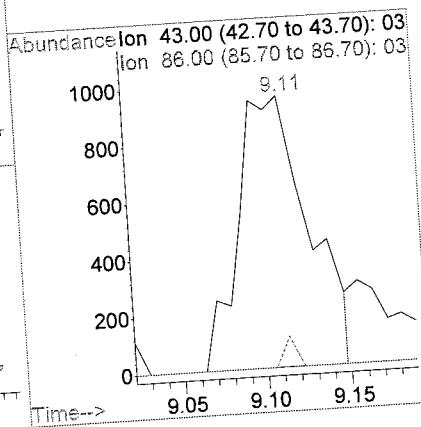
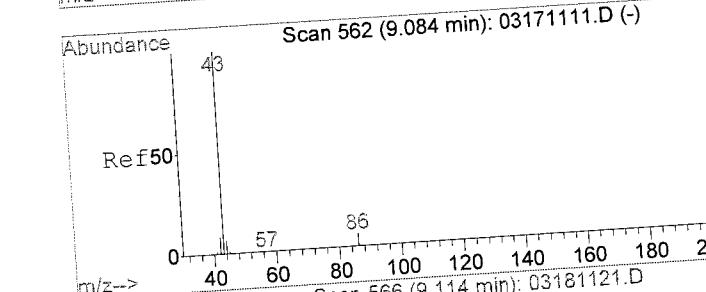
#16  
1,1-Dichloroethane  
Concen: 0.28 ug/L  
RT: 8.93 min Scan# 544  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

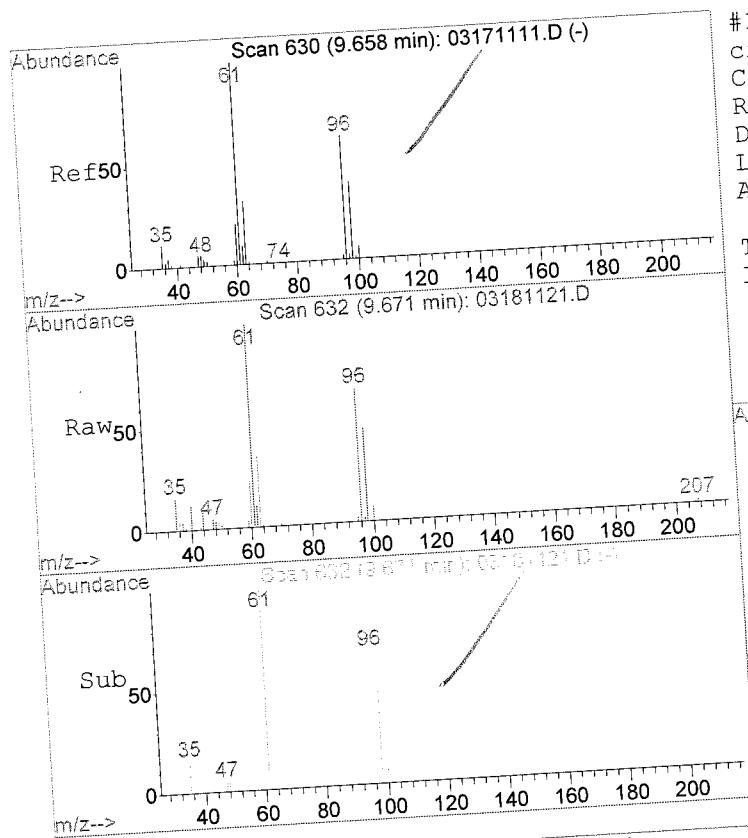
Tgt Ion: 63 Resp: 3239  
Ion Ratio Lower Upper  
63 100  
65 23.6 25.2 37.8#  
83 0.0 9.2 13.8#



#17  
Vinyl acetate  
Concen: 0.32 ug/L  
RT: 9.11 min Scan# 566  
Delta R.T. 0.03 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

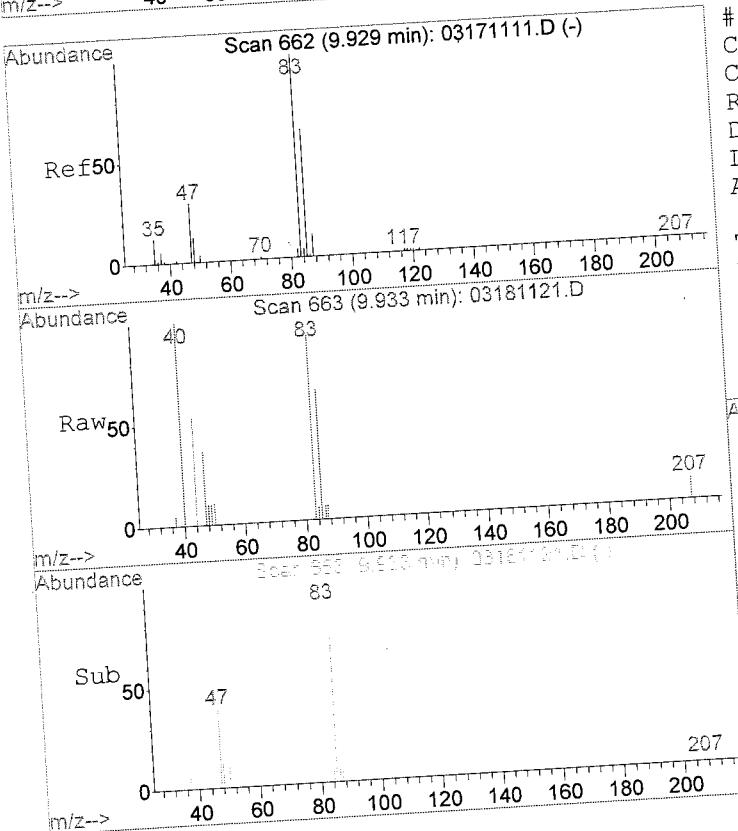
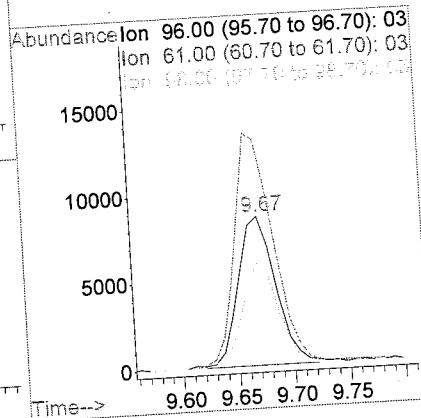
Tgt Ion: 43 Resp: 2821  
Ion Ratio Lower Upper  
43 100  
86 0.0 4.6 6.8#





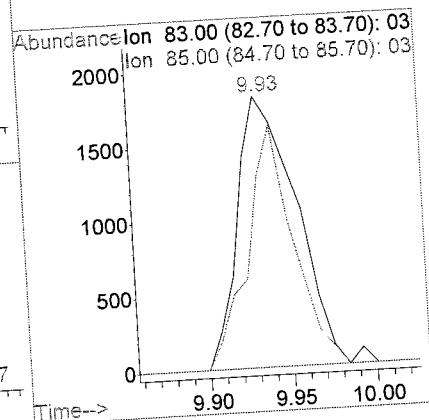
#19  
cis-1,2-Dichloroethene  
Concen: 3.59 ug/L  
RT: 9.67 min Scan# 632  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

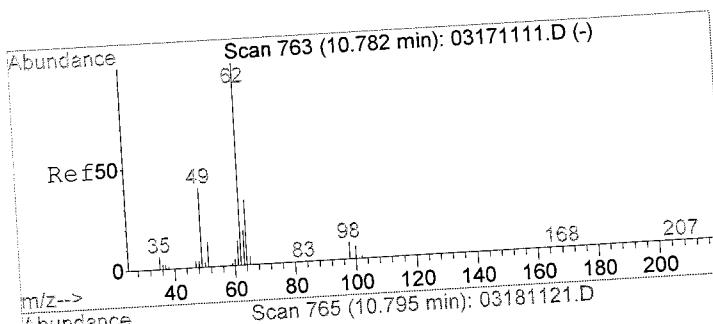
Tgt Ion: 96 Resp: 20270  
Ion Ratio Lower Upper  
96 100  
61 160.0 128.5 192.7  
98 66.5 49.9 74.9



#21  
Chloroform  
Concen: 0.47 ug/L  
RT: 9.93 min Scan# 663  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

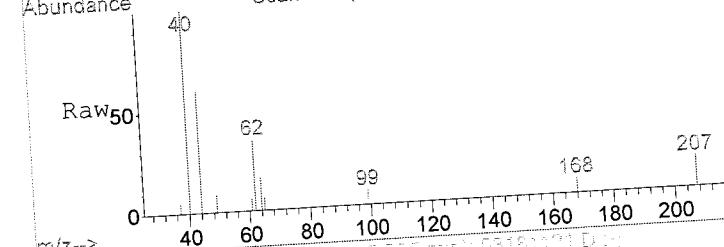
Tgt Ion: 83 Resp: 4421  
Ion Ratio Lower Upper  
83 100  
85 70.0 51.6 77.4



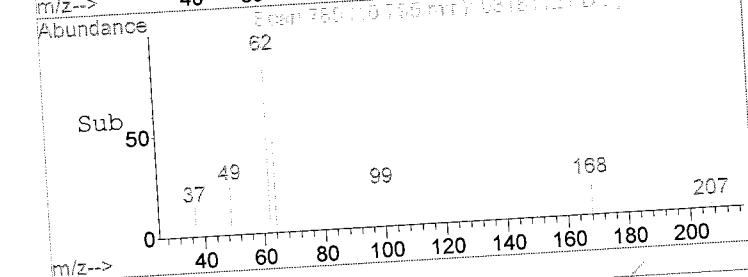
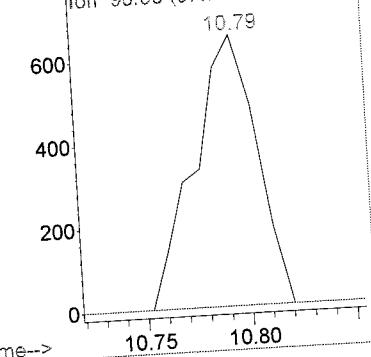


#24  
1,2-Dichloroethane  
Concen: 0.24 ug/L  
RT: 10.79 min Scan# 765  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 62 Resp: 1352  
Ion Ratio Lower Upper  
62 100  
98 0.0 7.0 10.6#



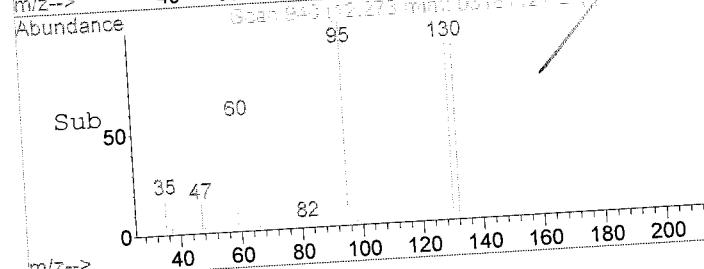
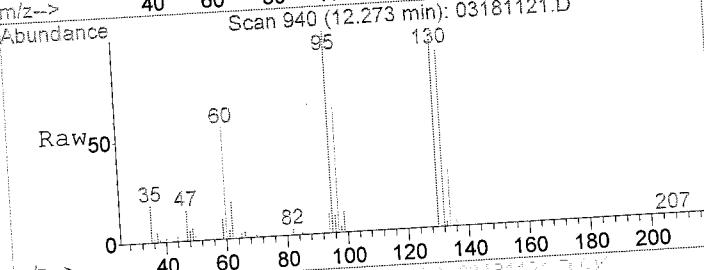
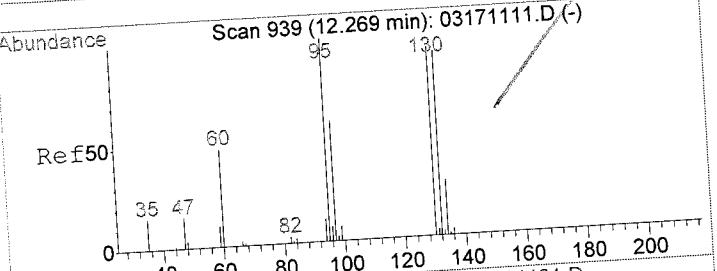
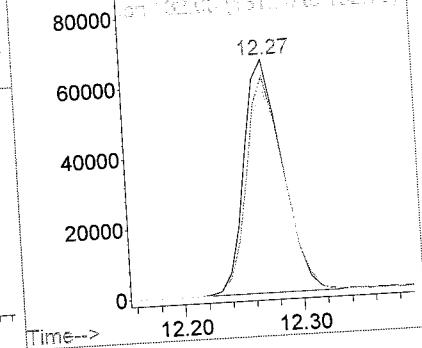
Abundance ion 62.00 (61.70 to 62.70): 03  
ion 98.00 (97.70 to 98.70): 03

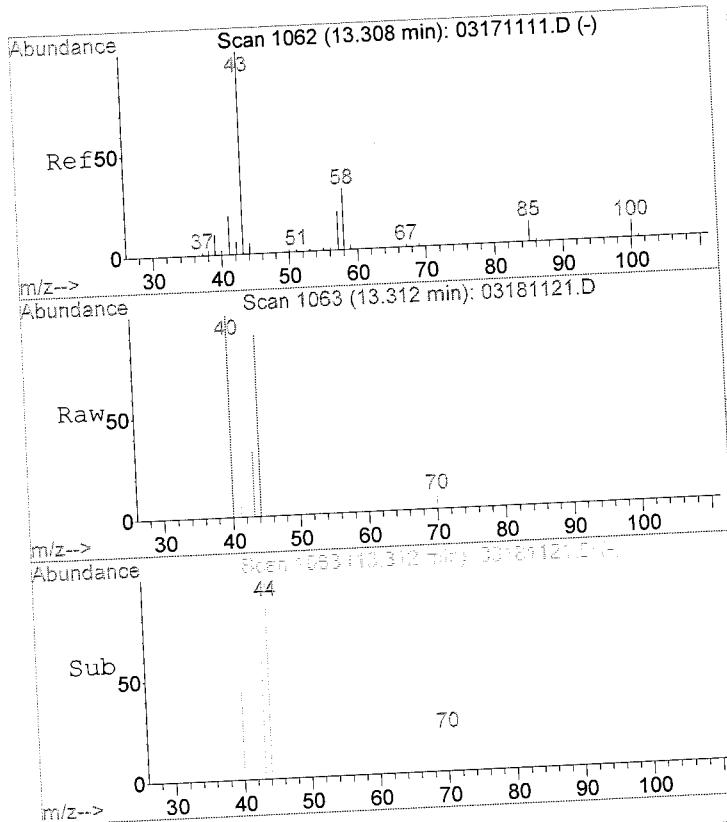


#32  
Trichloroethene  
Concen: 28.88 ug/L  
RT: 12.27 min Scan# 940  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 95 Resp: 150063  
Ion Ratio Lower Upper  
95 100  
130 90.5 74.2 111.4  
132 87.7 70.8 106.2

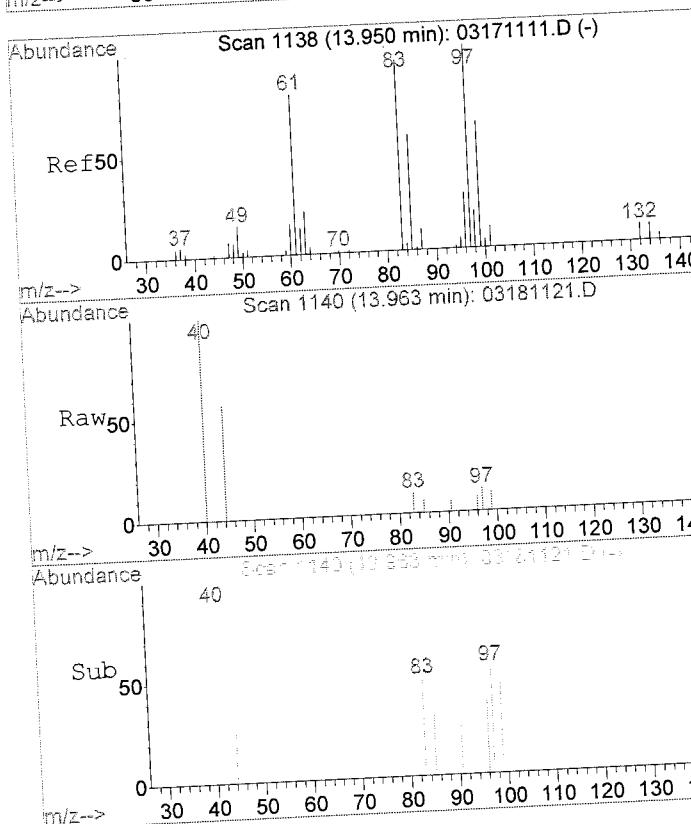
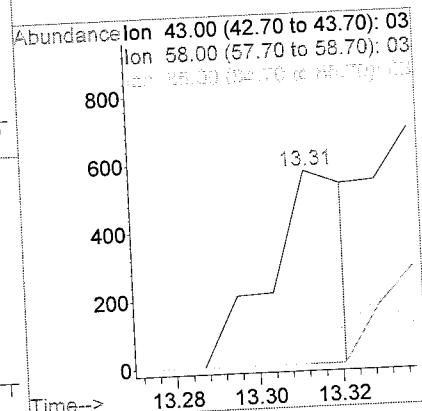
Abundance ion 95.00 (94.70 to 95.70): 03  
ion 130.00 (129.70 to 130.70): 03  
ion 132.00 (131.70 to 132.70): 03





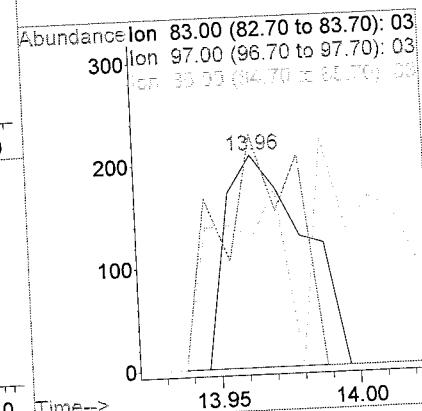
#36  
4-Methyl-2-pentanone (MIBK)  
Concen: 0.25 ug/L  
RT: 13.31 min Scan# 1063  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

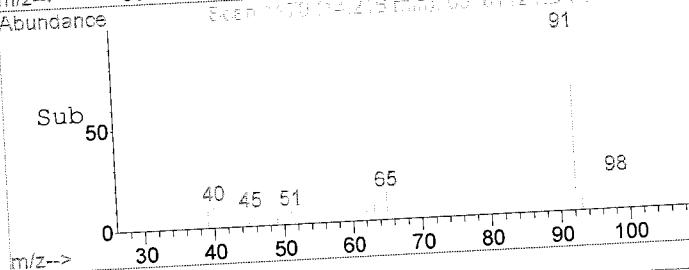
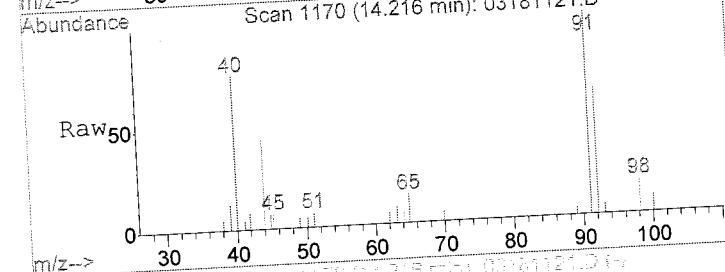
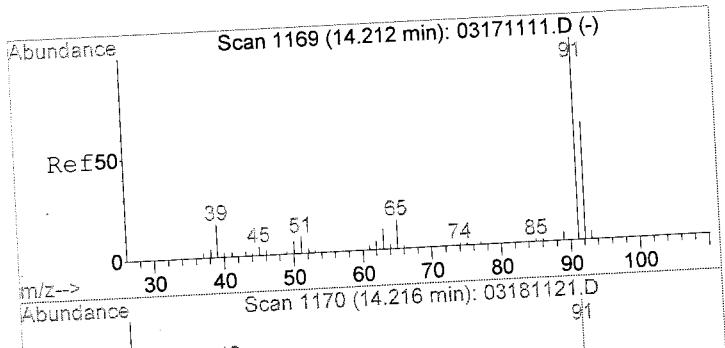
Tgt Ion: 43 Resp: 768  
Ion Ratio Lower Upper  
43 100  
58 0.0 25.4 38.0#  
85 0.0 7.4 11.0#



#38  
1,1,2-Trichloroethane  
Concen: 0.15 ug/L  
RT: 13.96 min Scan# 1140  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

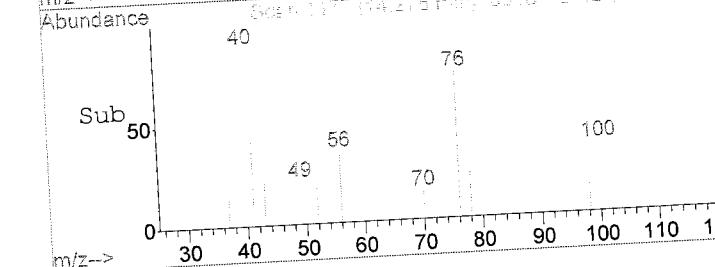
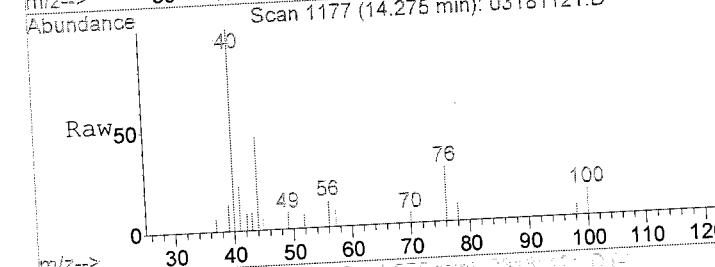
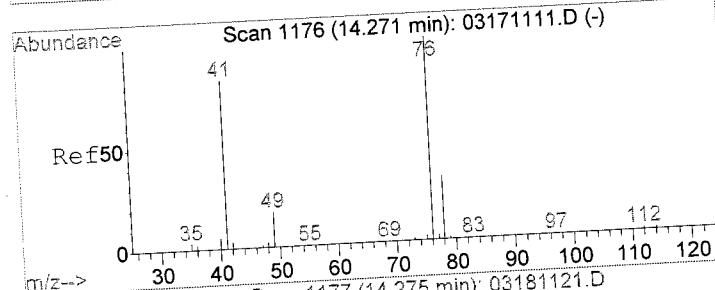
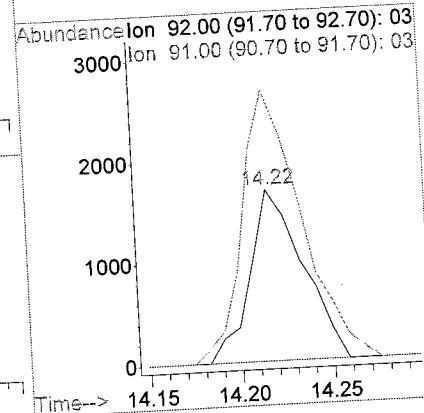
Tgt Ion: 83 Resp: 406  
Ion Ratio Lower Upper  
83 100  
97 106.9 83.0 124.6  
85 21.7 51.3 76.9#





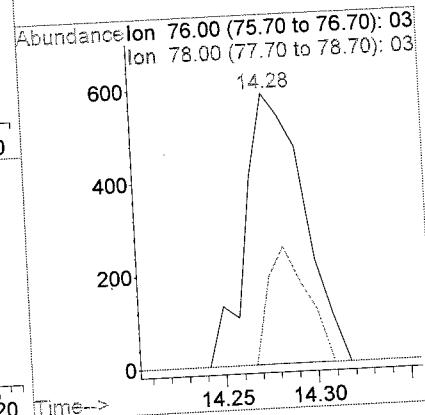
#40  
Toluene  
Concen: 0.29 ug/L  
RT: 14.22 min Scan# 1170  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

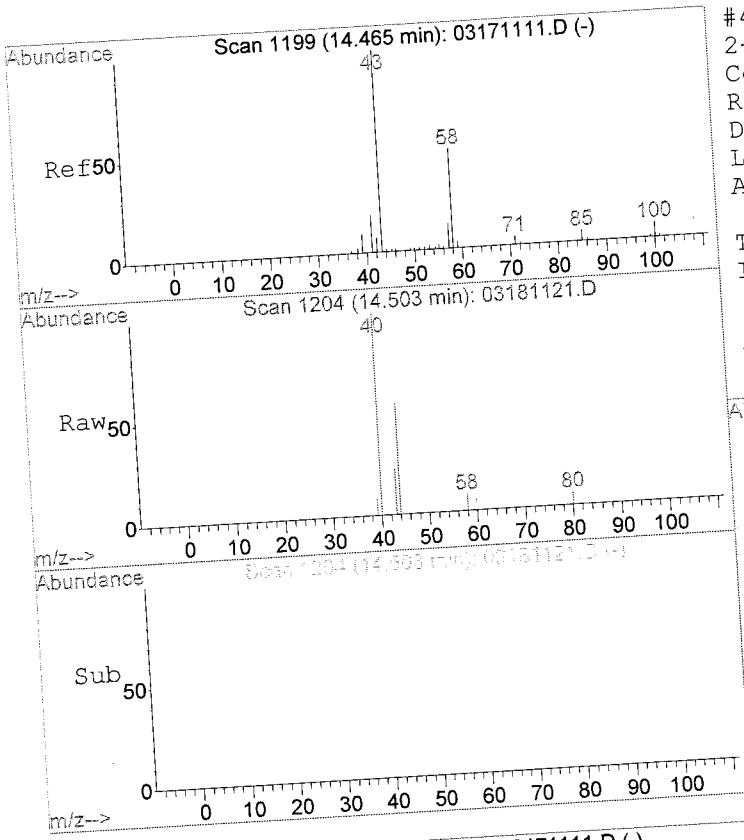
Tgt Ion: 92 Resp: 3391  
Ion Ratio Lower Upper  
92 100  
91 175.9 134.7 202.1



#42  
1,3-Dichloropropane  
Concen: 0.23 ug/L  
RT: 14.28 min Scan# 1177  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

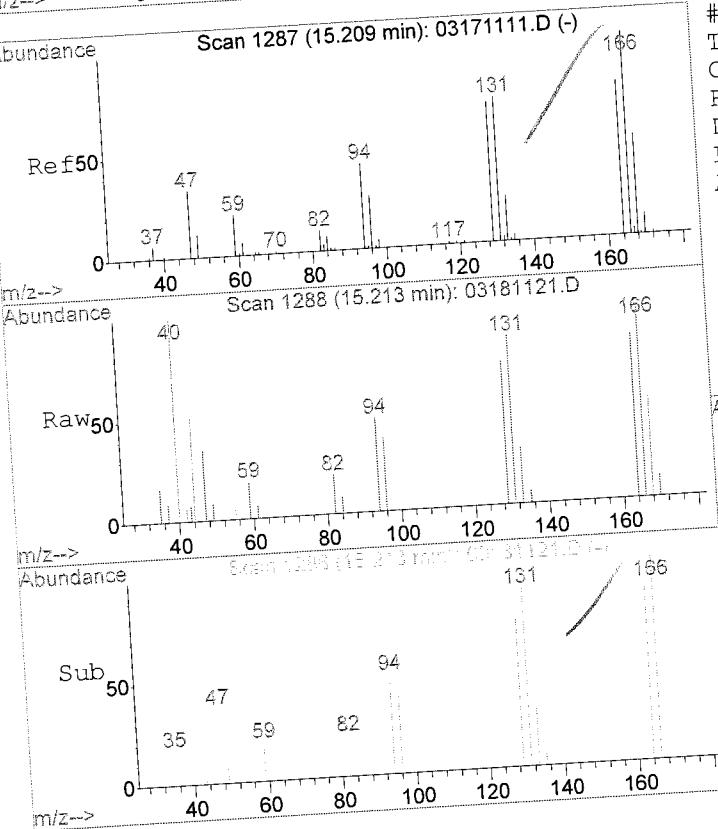
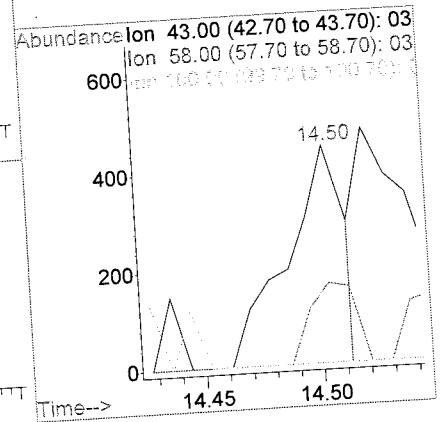
Tgt Ion: 76 Resp: 1292  
Ion Ratio Lower Upper  
76 100  
78 28.8 24.6 37.0





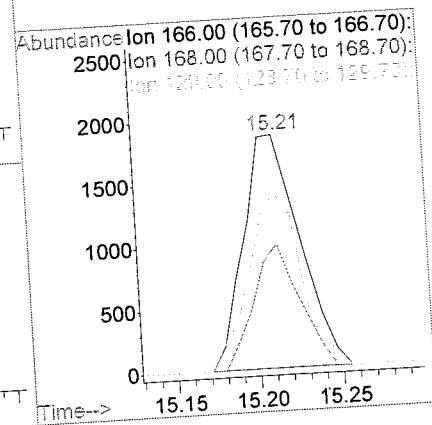
#43  
2-Hexanone  
Concen: 0.41 ug/L  
RT: 14.50 min Scan# 1204  
Delta R.T. 0.04 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

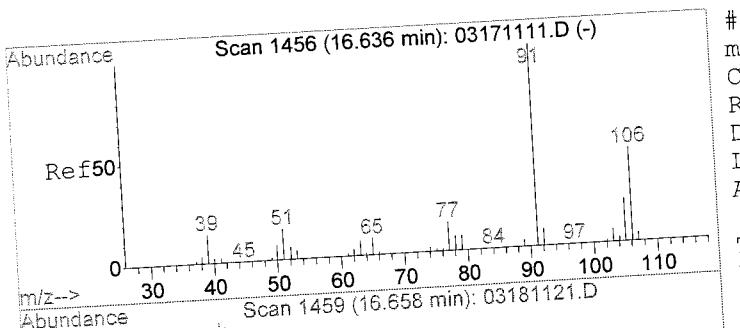
Tgt Ion: 43 Resp: 772  
Ion Ratio Lower Upper  
43 100  
58 28.2 38.2 57.4#  
100 0.0 0.0 0.0



#46  
Tetrachloroethene  
Concen: 0.97 ug/L  
RT: 15.21 min Scan# 1288  
Delta R.T. 0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

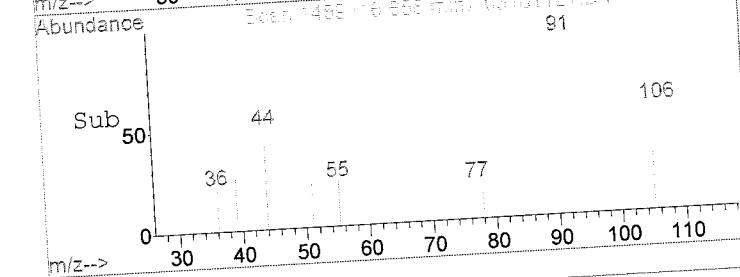
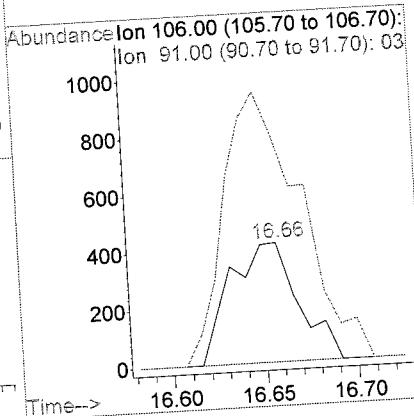
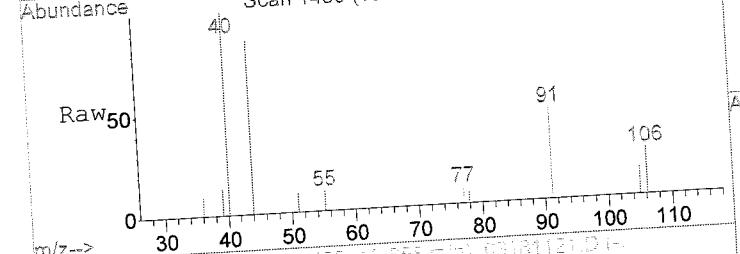
Tgt Ion: 166 Resp: 4364  
Ion Ratio Lower Upper  
166 100  
168 43.7 37.9 56.9  
129 70.5 59.8 89.8





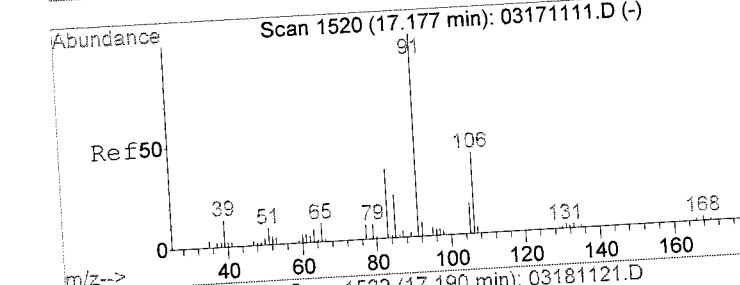
#50  
m,p-Xylenes  
Concen: 0.14 ug/L  
RT: 16.66 min Scan# 1459  
Delta R.T. 0.02 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 106 Resp: 1073  
Ion Ratio Lower Upper  
106 100  
91 254.2 171.2 256.8

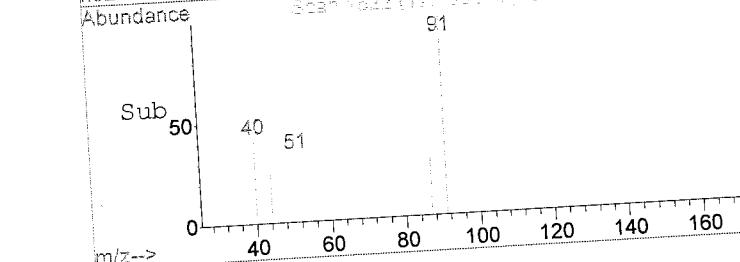
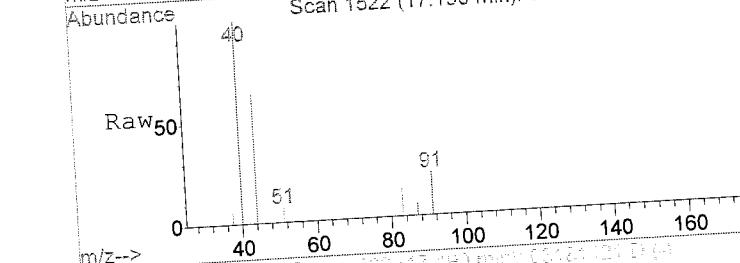
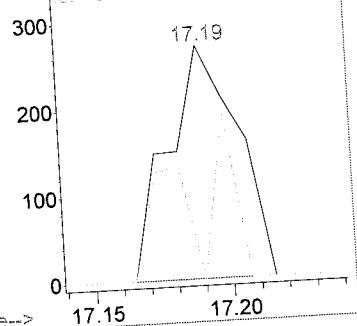


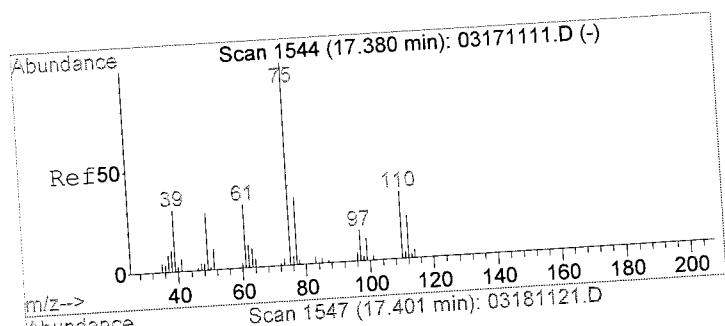
#56  
1,1,2,2-Tetrachloroethane  
Concen: 0.14 ug/L  
RT: 17.19 min Scan# 1522  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 83 Resp: 473  
Ion Ratio Lower Upper  
83 100  
131 0.0 5.9 8.9#  
85 20.7 50.6 76.0#



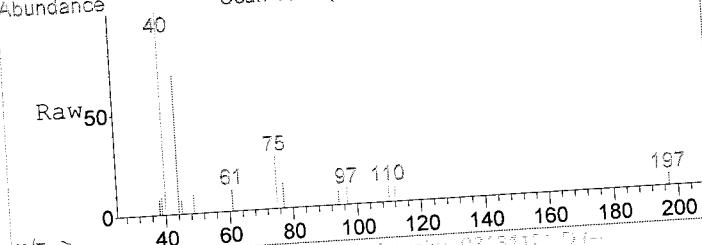
Abundance Ion 82.90 (82.60 to 83.60): 03  
Ion 130.95 (130.65 to 131.65):  
Ion 144.95 (144.65 to 145.65): 03





#57  
1, 2, 3-Trichloropropane  
Concen: 0.18 ug/L  
RT: 17.40 min Scan# 1547  
Delta R.T. 0.02 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 110 Resp: 131  
Ion Ratio Lower Upper  
110 100  
97 0.0 40.9 61.3#



Abundance ion 109.90 (109.60 to 110.60):  
ion 96.95 (96.65 to 97.65): 03

150 17.40

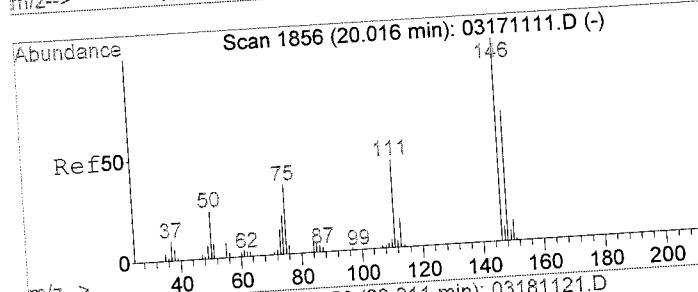
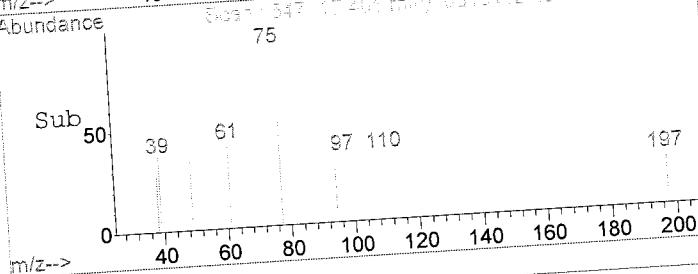
100

50

0

17.38 17.40

Time-->



#70  
1,2-Dichlorobenzene  
Concen: 0.11 ug/L  
RT: 20.01 min Scan# 1856  
Delta R.T. -0.00 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion: 146 Resp: 845  
Ion Ratio Lower Upper  
146 100  
111 52.1 35.5 53.3  
148 50.5 50.2 75.4

Abundance ion 146.00 (145.70 to 146.70):  
ion 111.00 (110.70 to 111.70):  
ion 148.00 (147.70 to 148.70):

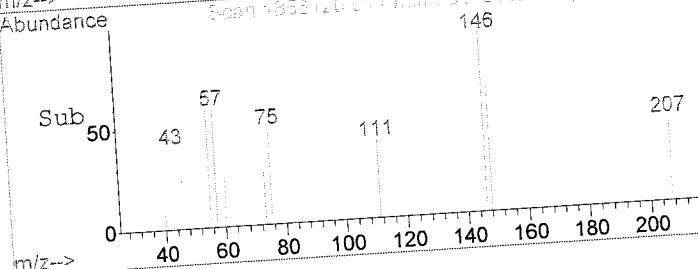
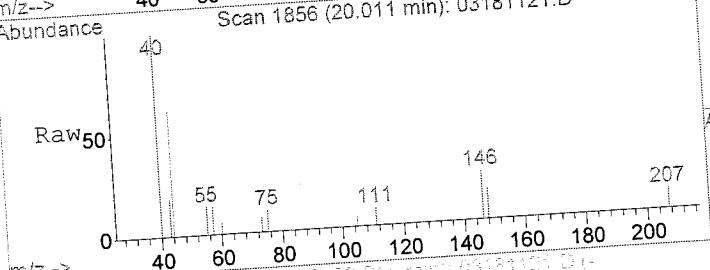
400

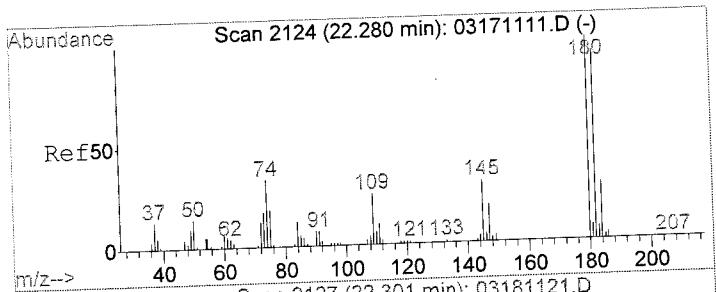
200

0

20.00 20.05

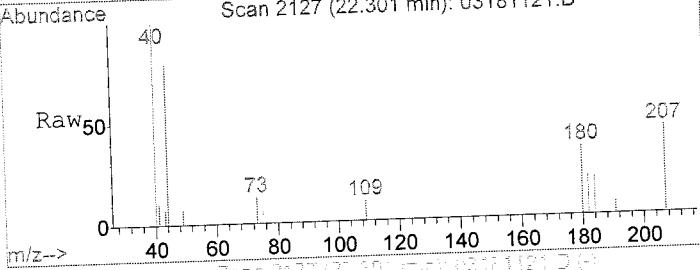
Time-->



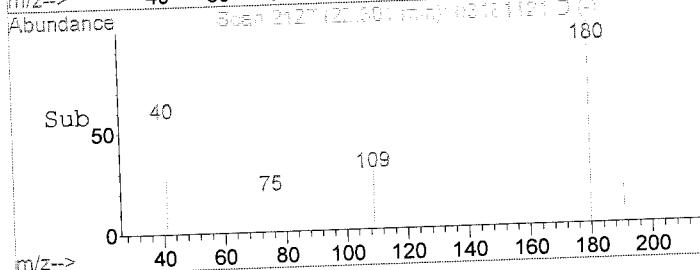
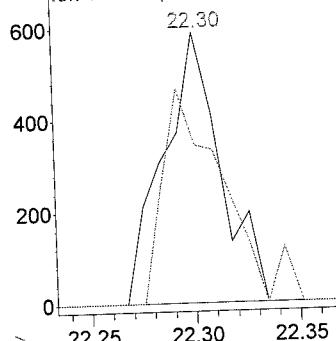


#73  
1,2,4-Trichlorobenzene  
Concen: 0.24 ug/L  
RT: 22.30 min Scan# 2127  
Delta R.T. 0.02 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion:180 Resp: 1124  
Ion Ratio Lower Upper  
180 100  
182 78.8 76.5 114.7

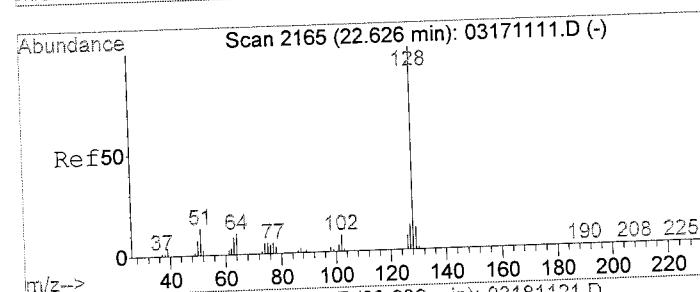


Abundance Ion 180.00 (179.70 to 180.70):  
Ion 182.00 (181.70 to 182.70):

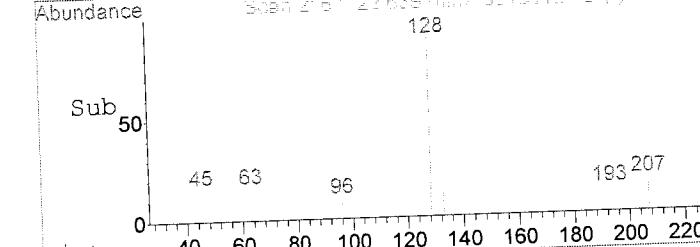
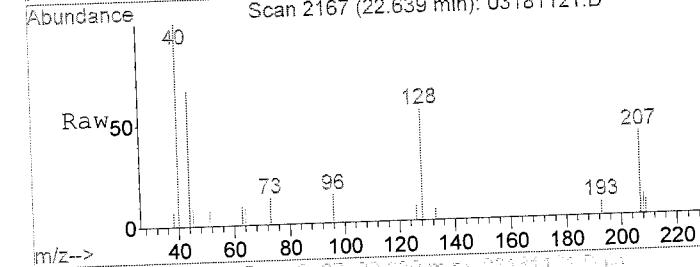
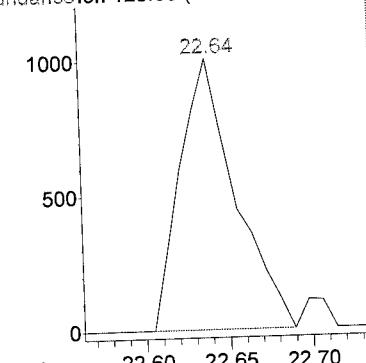


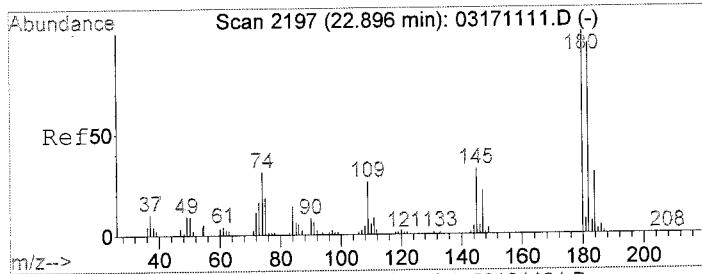
#74  
Naphthalene  
Concen: 0.37 ug/L  
RT: 22.64 min Scan# 2167  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm

Tgt Ion:128 Resp: 2310

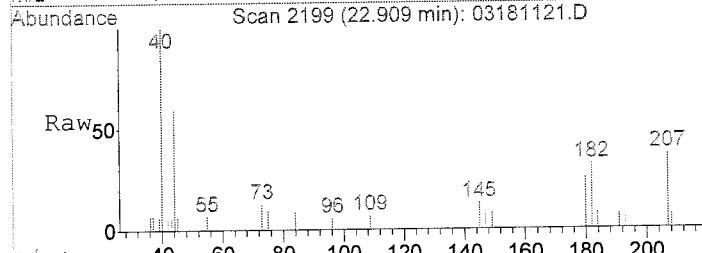


Abundance Ion 128.00 (127.70 to 128.70):

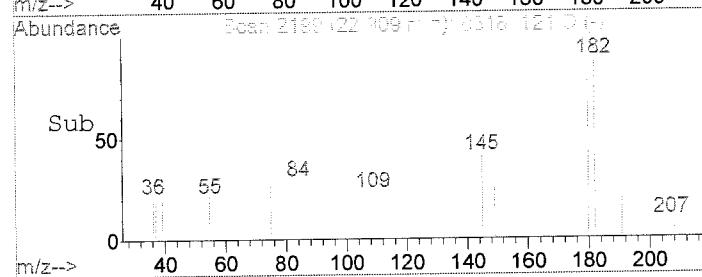




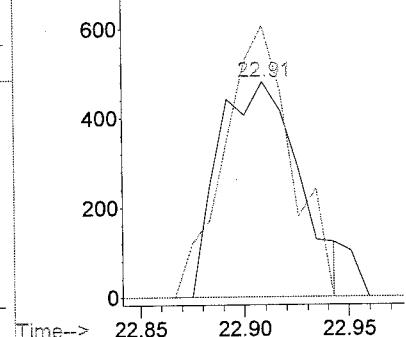
#76  
1,2,3-Trichlorobenzene  
Concen: 0.33 ug/L  
RT: 22.91 min Scan# 2199  
Delta R.T. 0.01 min  
Lab File: 03181121.D  
Acq: 18 Mar 2011 5:40 pm



Tgt Ion:180 Resp: 1282  
Ion Ratio Lower Upper  
180 100  
182 105.0 76.1 114.1



Abundance Ion 180.00 (179.70 to 180.70):  
Ion 182.00 (181.70 to 182.70):



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

DIGESTION and/or EXTRACTION

METHOD: EPA 3520C

Work Order:

PUC0829-01

## PREPARATION BENCH SHEET

11C0526

TestAmerica Phoenix

Printed: 3/21/2011 1:01:35PM

## Matrix: Water

'prepared using: N\_GC/MS Semivolatiles - N\_EPA 3520C

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Spike	ul Surrogate	Initials	Extraction Comments
11C0526-BLK1	QC	03/14/11 17:35	1000	1							100	
11C0526-BS1	QC	03/14/11 17:35	1000	1		PT05700	200				100	
11C0526-BSD1	QC	03/14/11 17:35	1000	1		PT05700	200				100	
PUC0730-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	Level 3
PUC0731-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0731-02	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0731-03	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0731-04	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0827-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0827-02	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0827-03	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0827-04	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	880	1						100	
PUC0827-05	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	
PUC0829-01	D	N_1,4-Dioxane (SW82)	03/14/11 17:35	1000	1						100	Level 3

Reagents used in Batch

Reagent      Description      Solvent

--	--	--

Spiking Reviewed By \_\_\_\_\_

Preparation Reviewed By

Extracts Received By

Date

Page 1 of 1

190 of 280

C. Hain  
3/21/11

Spiking Reviewed By \_\_\_\_\_

Date

Page 1 of 1

Printed: 3/21/2011 1:01:35PM

TestAmerica

Check box if the back of the previous page is used for additional notes, comments, or calculations. The use of other scratch paper is strictly prohibited.

Phoenix

Extraction Date: 3/26/11

## Liquid/Liquid Extraction Record

Test Code: 1,4 DioxaneLIMS Batch No: BNA03NIAElement No.: 1C0526Analytical Method: 3570 CSolvent/Lot No. 1. DCM / 3453012 Final Sol.: DCM / 345501 Na<sub>2</sub>SO<sub>4</sub> Lot #: 1Acid/Base/Lot No. 1. 2. 3.Surrogate: Mod 8171 Conc. 200 ppm Volume: 100 mL Std. ID#: PV01147 Exp Date 8/24/11 3:5:Spike #1: 1,4 Dioxane 100 ppm Volume: 200 mL Std. ID#: PTL5700 Exp Date 10-31-11 3:5:GSpike #2: 1 Conc. 1 Volume: 1 Std. ID#: 1 Exp Date 1Spike #3: 1 Conc. 1 Volume: 1 Std. ID#: 1 Exp Date 1Spike #4: 1 Conc. 1 Volume: 1 Std. ID#: 1 Exp Date 1Start Time: 17:35 End Time: 17:45 Spiked By: RA Spike Witness: JGK-D'd by: JA E-vap'd by: JG Solvent Ex'd by: NA Brought to V<sub>f</sub> & Vialled by: CR

	Sample #	RE	Sample Frac.	pH <sup>1</sup>	Initial Vol/Wt (mLs/g)	Final Vol. (mLs)	K-D'd (✓)	Evp'd (✓)	Clean Up <sup>2</sup>	Color	Sample linked at:
1	MB	NA	NA	S	1L	1	✓	✓	NA	clear	NA
2	LCS		1	S	1L	1	✓	✓		clear	
3	LCSD		1	S	1L	1	✓	✓		clear	
4	MS PVL0730-1	D	7	1L	1	✓	✓			clear	
5	MSD PVL0731-1	D	7	1L	1	✓	✓			clear	
6	RLV PVL0731-2	D	7	1L	1	✓	✓			blue clear	
7	PVL0731-3	D	7	1L	1	✓	✓			clear	
8	PVL0731-4	D	7	1L	1	✓	✓			clear	
9	PVL0827-1	D	7	1L	1	✓	✓			clear	
10	PVL0827-2	D	7	1L	1	✓	✓			clear	
11	PVL0827-3	D	7	1L	1	✓	✓			clear	
12	PVL0827-4	D	7	88mL	1	✓	✓			clear	
13	PVL0827-5	D	7	1L	1	✓	✓			clear	
14	PVL0829-1	1	D	1L	1	✓	✓			clear	
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

<sup>1</sup> Sample pH / Adjusted pH;<sup>2</sup> AW is Acid Wash, DW is DCM wash.

a = Acid Fraction, b = base/neutral fraction

 Insufficient Sample for MS/MSD     MS/MSD Designated     MS/MSD Chosen     Sample Container(s) Shaken & Rinsed with Solvent
Sample Extracts located in: Box# \_\_\_\_\_ Row(s) & Numbers \_\_\_\_\_ BNA Freezer CR SVOA's Fridge \_\_\_\_\_Comments: line 6 x 100mL immiscible blue - 03-16-11

191 of 280

Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

### METHOD

MODIFIED EPA 8270C

DATE: 01/05/11

Work Order: PUC0829-01

Attachment 1

INITIAL CALIBRATION CURVE CHECKLIST

Department: Semivola	Method: Mod. 8270 C	Instrument #: CMS14
Analyst: C. Lauer	Analysis Date: 01-05-11	
Method name saved in the file: DIPANE \ 010511.M		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, <input checked="" type="radio"/> 9, 10, 11, 12 2. Did the calibration curve pass the method criteria? <input checked="" type="radio"/> Y <input type="radio"/> N 3. Were any points of the curve removed or replaced? <input checked="" type="radio"/> Y <input type="radio"/> N		
If yes, what points were removed or replaced: lowest middle highest Why?		
4. Were any individual analyte points removed? If yes, what points were removed or replaced: lowest middle highest List of the analytes: Why?		
5. Circle the calibration model used (you may circle one or more) <input checked="" type="checkbox"/> Average Response Factor <input type="checkbox"/> Linear Regression / not forced through zero / simple linear <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration <input type="checkbox"/> Linear Regression / forced through zero <input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements? <input checked="" type="radio"/> Y <input type="radio"/> N		

Review Signatures:	Analyst: <i>C. Lauer</i>	Date: <i>1-05-11</i>
	Reviewer: <i>Jessica Brueckner</i>	Date: <i>01/05/11</i>



THE LEADER IN ENVIRONMENTAL TESTING

## Phoenix

SOP No. PE-QAD-022, Rev. 1

Effective Date: 09/30/2010

Page No.: 1 of 1

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: Semiva	Method: MwA-8270C	Instrument #: GCMS14
Analyst: C-Laurie	Analysis Date: 2/25/14 01/05/14 or 3/01/14	
Method name saved in the file: D:\RANE\010511.D.m		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		
2. Did the calibration curve pass the method criteria? Y N		
3. Were any points of the curve removed or replaced? Y N		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? Y N		
If yes, what points were removed or replaced: lowest middle highest		
List of the analytes:		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input type="checkbox"/> Average Response Factor <input type="checkbox"/> Linear Regression / not forced through zero / simple linear <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration <input type="checkbox"/> Linear Regression / forced through zero <input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements? Y N		

Review Signatures:	Analyst: <u>C Fair</u>	Date: <u>3/01/2011</u>
	Reviewer: <u>Jessica Benshaw</u>	Date: <u>3/01/11</u>



Department: Semi-Volatiles

Page 21 of 22

SOP  
Number/Revision

05-020.03

Date issued:  
March 2007Expiration Date:  
March 2009

TITLE:

EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS Analysis

NOT TO BE PHOTOCOPIED

EPA 8270C Modified 1,4-Dioxane by Isotope Dilution, Extraction & GC/MS Analysis  
Data Review Checklist (Example)ANALYSIS DATE: 6-05-11

- |  | MEETS CRITERIA?                        |
|--|--|
| 1. DFTPP (50ng) VERIFY MEETS CRITERIA EVERY 12 HOURS<br><i>(010-10-10)</i>   | Y/N                                    |
| 2. INITIAL CALIBRATION CURVE (MIN. 5 LEVELS) DATE: <u>010511.m</u><br>- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05<br>- CCC 1,4-DICHLOROBENZENE < 30% RSD, 1,4-DIOXANE ≤ 20% RSD<br>- ALL OTHER COMPOUNDS < 15% RSD OR USE CURVE ( $r^2 > 0.990$ )<br>TAILING FACTOR B/N BENZIDENE: 3.0                                     | Y/N<br>Y/N<br>Y/N<br>Y/N<br>Y/N<br>Y/N |
| 3. INITIAL CALIBRATION VERIFICATION (SEC. SOURCE) ANALYZED   | Y/N                                    |
| 4. CONTINUING CALIBRATION CHECK (EVERY 12 HOURS)<br>- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05<br>- CCC 1,4-DICHLOROBENZENE < 20% D; 1,4-DIOXANE ≤ 20%<br>- IS 1,4-DCB-d4 AREA -50% TO -100% TO MID-POINT IN I. CAL<br>- IS 1,4-DCB-d4 RT ± 30 SEC. TO MID-POINT IN INITIAL CALIB.<br>- TAILING FACTOR B/N BENZIDENE: 3.0 | Y/N<br>Y/N<br>Y/N<br>Y/N<br>Y/N        |
| 5. METHOD BLANK<br>- ANALYZE ONE PER BATCH (< 20 SAMPLES)<br>- 1,4-DICHLOROBENZENE MUST BE < REPORTING LIMIT   | Y/N<br>Y/N                             |
| 6. LCS/LCSD WITHIN LIMITS<br>- MUST BE ANALYZED PER 20 SAMPLES/BATCH<br>- % RECOVERY WITHIN 80 - 120% LIMITS<br>- RPD WITHIN LIMITS (< 25 RPD)   | Y/N<br>Y/N<br>Y/N                      |

Continued on next page



Department: Semi-Volatiles

Page 22 of 22

SOP:  
Number/Revision:  
05-020-03  
Date issued:  
March 2007  
Expiration Date:  
March 2009

TITLE:

EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS Analysis

NOT TO BE PHOTOCOPIED

7. MS/MSD

- MUST BE ANALYZED PER 20 SAMPLES/BATCH
- % RECOVERY WITHIN 70-130% LIMITS
- RPD WITHIN LIMITS ( $\leq 25\text{-}RPD$ )

Y/N

Y/N

Y/N

8. SAMPLES

- EXTRACTED WITHIN 7 DAYS OF SAMPLING
- ANALYZED WITHIN 40 DAYS OF EXTRACTION
- IS 1,4-DCB-d4 RT  $\pm$  30 SECs AND IS AREA  $\pm$ 50% TO  $\pm$ 100% TO  
CONT. CAL
- SURROGATE RECOVERIES WITHIN LIMITS

Y/N

Y/N

Y/N

Y/N

✓✓

9. TUNE INJECTED WITHIN 12hr TIME PERIOD

✓

COMMENTS

ANALYST:

a

DATE:

1-5-11

REVIEWER:

DATE:

Response Factor Report GCMS14

Method Path : D:\Ymsd\chem\Y\GCMS14\METHODS\14DIOXANE.Y  
Method File : 010511.M  
Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
Last Update : Wed Jan 05 13:29:49 2011  
Response Via : Initial Calibration

Calibration Files  
1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
I	1,4-Dioxane-d8									ISTD	
C	1,4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018
I	1,4-Dichlorobenzene									ISTD	
C*	1,4-Dichlorobenzene	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644
P	N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195
S	Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792

(#) = Out of Range

C 1.5-11

1/20/11

## Response Factor Report GCMS14

Method Path : D:\Ymsdchem\GCMS14\METHODS\14DIOXANE  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1) I 1,4-Dioxane-d8										ISTD	
2) C 1,4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018	4.12
3) I 1,4-Dichlorobenzene										ISTD	
4) C* 1,4-Dichlorobene	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644	4.43
5) P N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195	5.28
6) S Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792	4.99

(#= Out of Range

update run shift  
 a 2-25-11

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M /  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D ✓
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D ✓
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D ✓
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D ✓
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D ✓
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D ✓
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D ✓
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D ✓
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D ✓
10	CC	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D ~

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	110511
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011	
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011	
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011	
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011	
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011	
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011	
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011	1.5.11
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011	
10	CC	Jan 05 13:29 2011	Jan 05 12:20 2011	

010511.M Wed Jan 05 13:33:03 2011

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D
10	CC	10	20	R:\022511\02251108.D ✓ used to update due to PC shift

#	ID	Update Time	Quant Time	Acquisition Time	
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	1/05/2011	✓
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011		2/28/11
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011		
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011		
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011		
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011		
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011		
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011		
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011		
10	CC	Feb 28 10:27 2011	Feb 28 10:27 2011	25 Feb 2011	6:23 pm ✓

010511D.M Mon Feb 28 10:59:27 2011

3/2011

200 of 280

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
Method File : 010511.M  
Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
Last Update : Wed Jan 05 13:29:49 2011  
Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.975	1.000	A	1	A	B
2 C	1,4-Dioxane	88	3.028	1.018	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.092	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.104	1.002	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.422	1.054	A	1	A	B
6 S	Nitrobenzene-d5	82	6.557	1.076	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

010511.M Wed Jan 05 13:33:14 2011

✓

201 of 280

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12  
 Misc Info 1,4-DIOXANE

Instrument Name GCMS14

10ug/mL PU00063

01051110.D

D:\msdchem\1\GCMS14\DATA\010511\  
DIOX010511.m

	CCV	ICAL	PASS/FAIL		
	Response	Response	0.5X	2X	
Internal Standard 1,4-Dichlorobenzene-d4	243008	243008	121504	486016	PASS
Internal Standard 1,4-Dichlorobenzene-d4	RT 6.09	RT 6.09	-0.5min 5.59	+0.5min 6.59	PASS

*update**01-5-11*

*ANS*  
**202 of 280** <sup>2 PM</sup>

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12  
 Misc Info 1,4-DIOXANE  
 Instrument Name GCMS14

NAME	RT	mid-RT				
		CCV RRT	010511.M	AGREE	AGREE	PASS/FAIL
		Value	-0.06	0.06		
(Target/IS)						
IS 1,4-Dioxane-d8	2.975 ✓					
1,4-Dioxane	3.028 ✓	1.0178 ✓	1.0178 ~	0.9578 ✓	1.0778 <-PASS	
IS 1,4-Dichlorobenzene-d4	6.092 ✓					
1,4-Dichlorobenzene	6.104 ✓	1.0019 ✓	1.0019 ~	0.9419 ✓	1.0619 <-PASS	
N-Nitrosodi-n-propylamine	6.422 ✓	1.0541 ✓	1.0541 ~	0.9941 ✓	1.1141 <-PASS	
Nitrobenzene-d5	6.557 ✓	1.0763 ✓	1.0763 ~	1.0163 ✓	1.1363 <-PASS	

Update only.  
 Added in Revised  
 Review checklist for  
 1,4-Dioxane

03-09-11

BSP/11

TestAmerica  
Phoenix

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\msdchem\1\GCMS14\sequence\010511.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\010511\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

- (X) Full Method (X) Inject Anyway  
( ) Reprocessing Only ( ) Don't Inject

Line	Sample	Sample Name/Misc Info
1)	Sample 1	01051101 DB5MS14 DCM
2)	Sample 2	01051102 DB5MS14 DCM
3)	Sample 3	01051103 DB5MS14 25ng tune pu00017 <i>✓</i>
4)	Sample 4	01051104 DB5MS14 ✓25ng TUNE PU00017 <i>✓</i>
5)	Sample 5	01051105 DIOXANE BLANK
6)	Sample 6	01051106 DIOXANE 0.5ug/mL PU00059
7)	Sample 7	01051107 DIOXANE 1.0ug/mL PU00060
8)	Sample 8	01051108 DIOXANE 2.0ug/mL PU00061
9)	Sample 9	01051109 DIOXANE 4.0ug/mL PU00062
10)	Sample 10	01051110 DIOXANE 10ug/mL PU00063
11)	Sample 11	01051111 DIOXANE 20ug/mL PU00064
12)	Sample 12	01051112 DIOXANE 30ug/mL PU00065
13)	Sample 13	01051113 DIOXANE 40ug/mL PU00066
14)	Sample 14	01051114 DIOXANE 100ug/mL PU0067
15)	Sample 15	01051115 DIOXANE QCS10ug/mL PU00068 <i>✓</i>
16)	Sample 1	01051116 DIOXANE 10ug/mL PU00063ccv <i>PCM</i>
17)	Sample 2	01051117 DIOXANE 10ug/mL PU00063ccv
18)	Sample 3	01051118 DIOXANE 11A0067-BLK1
19)	Sample 4	01051119 DIOXANE PTL1256-03RE1
20)	Sample 5	01051120 DIOXANE PTL1256-04RE1
21)	Sample 6	01051121 DIOXANE PTL1256-06RE1
22)	Sample 7	01051122 DIOXANE PTL1256-07RE1
23)	Sample 8	01051123 DIOXANE PTL1262-01RE1
24)	Sample 9	01051124 DIOXANE PTL1262-02RE1
25)	Sample 10	01051125 DIOXANE PTL1256-10
26)	Sample 11	01051126 DIOXANE PTL1262-01
27)	Sample 12	01051127 DIOXANE PTL1262-02

Sequence Reviewed By: a

Date: 1-6-11

Date Analyzed: 1-6-11

Analyst: a

Date Run: 1-5-11

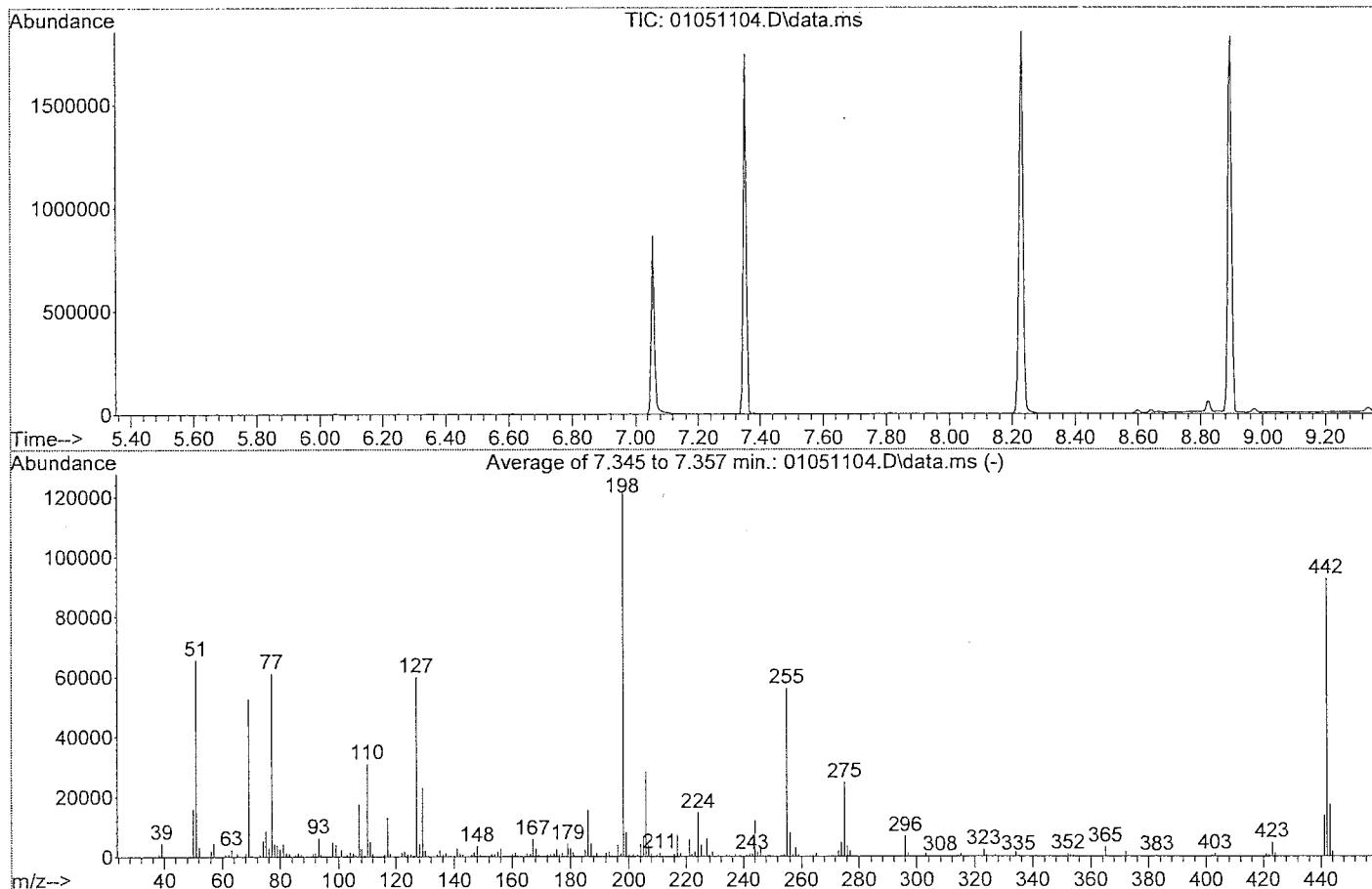
204 of 280

## DFTPP

Data Path : D:\Ymsdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\Ymsdchem\Y1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Fri Sep 10 17:23:33 2010



AutoFind: Scans 963, 964, 965; Background Corrected with Scan 958

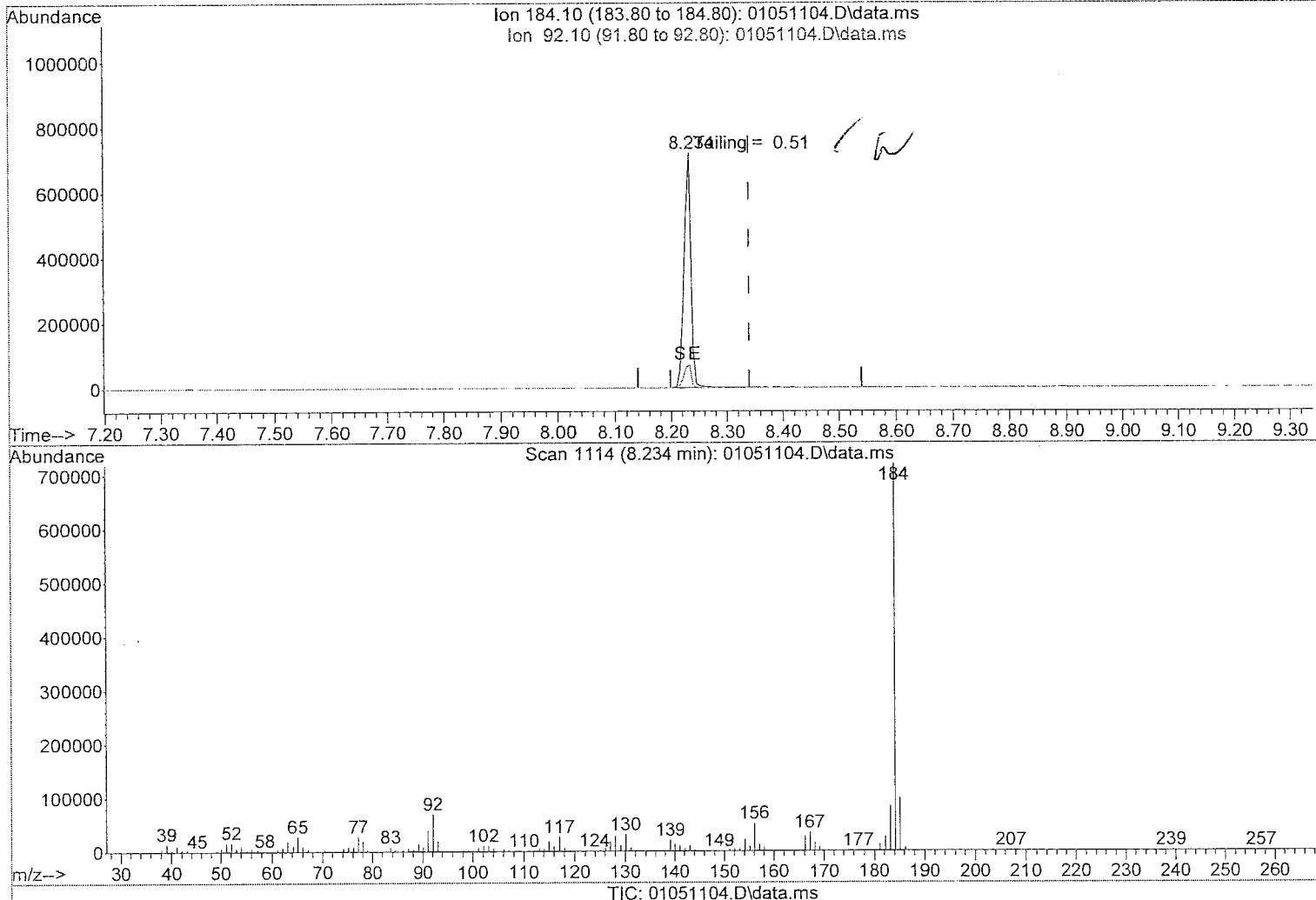
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	65567	PASS
68	69	0.00	2	1.8	948	PASS
69	198	0.00	100	43.2	52531	PASS
70	69	0.00	2	0.4	221	PASS
127	198	40	60	49.2	59789	PASS
197	198	0.00	1	0.7	889	PASS
198	198	100	100	100.0	121514	PASS
199	198	5	9	6.5	7948	PASS
275	198	10	30	20.3	24613	PASS
365	198	1	100	2.6	3102	PASS
441	443	0.01	100	78.5	13579	PASS
442	198	40	100	76.1	92525	PASS
443	442	17	23	18.7	17299	PASS

205 of 280

## Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 11:46:05 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\TUNE8270.M  
 Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 QLast Update : Fri Sep 10 17:23:33 2010  
 Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.234min (-0.106) 7.68

response 603050

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.42
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051105.D

Acq On : 5 Jan 2011 10:44 am

Operator : CL

Sample : BLANK

Misc : 1, 4-DIOXANE

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 969	96	300515	20. 00	ug/mL	0. 00
3) 1, 4-Dichlorobenzene-d4	6. 092	152	231052	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	0. 000	82	0	0. 00	ug/mL	
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 999	88	49	0. 00	ug/mL#	1
4) 1, 4-Dichlorobenzene	6. 092	146	306	0. 01	ug/mL#	1

(##) = qualifier out of range (m) = manual integration (+) = signals summed

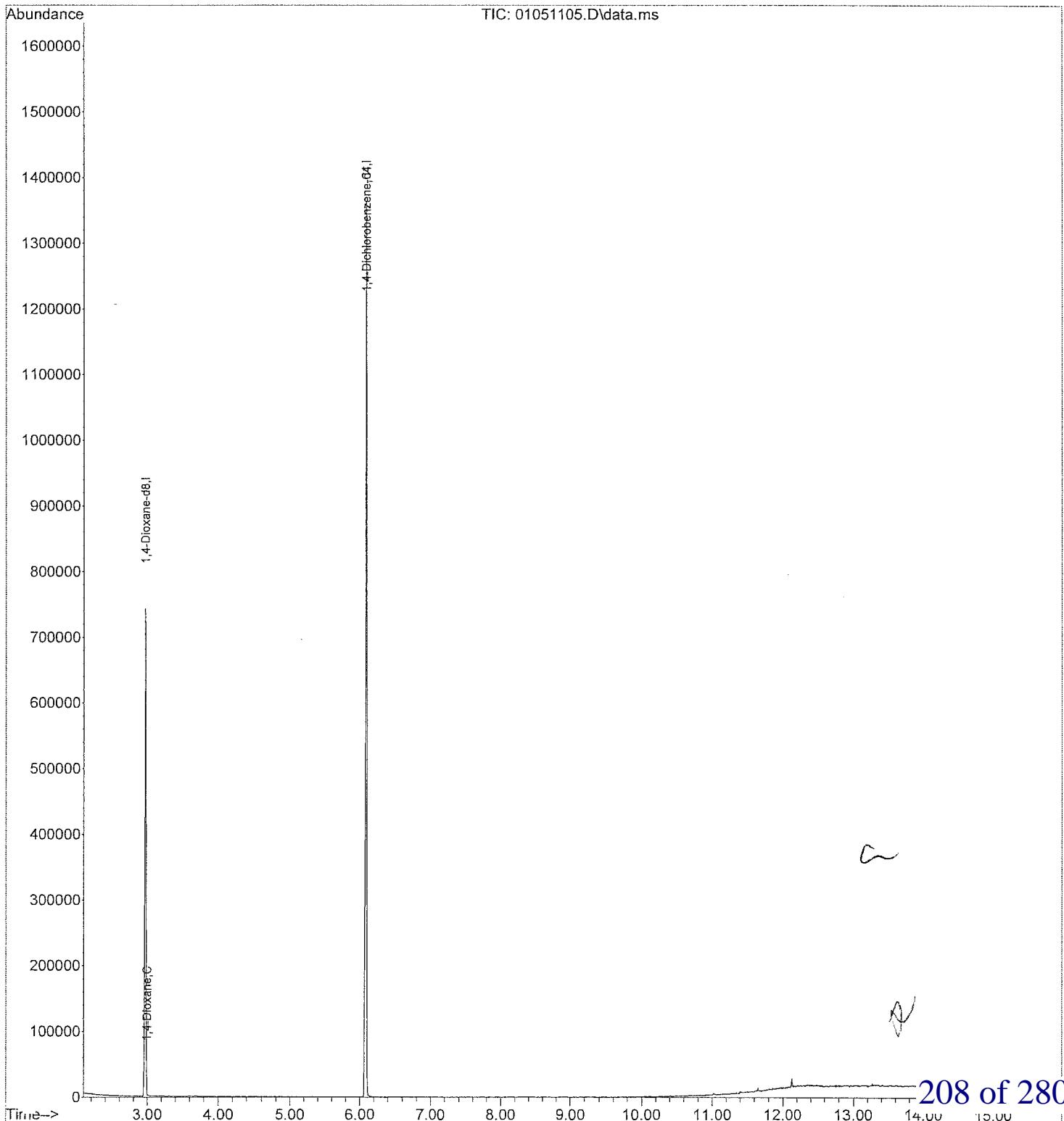
01-5-11

JULY 11

207 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\  
Data File : 01051105.D  
Acq On : 5 Jan 2011 10:44 am  
Operator : CL  
Sample : BLANK  
Misc : 1,4-DIOXANE  
ALS Vial : 5 Sample Multiplier: 1

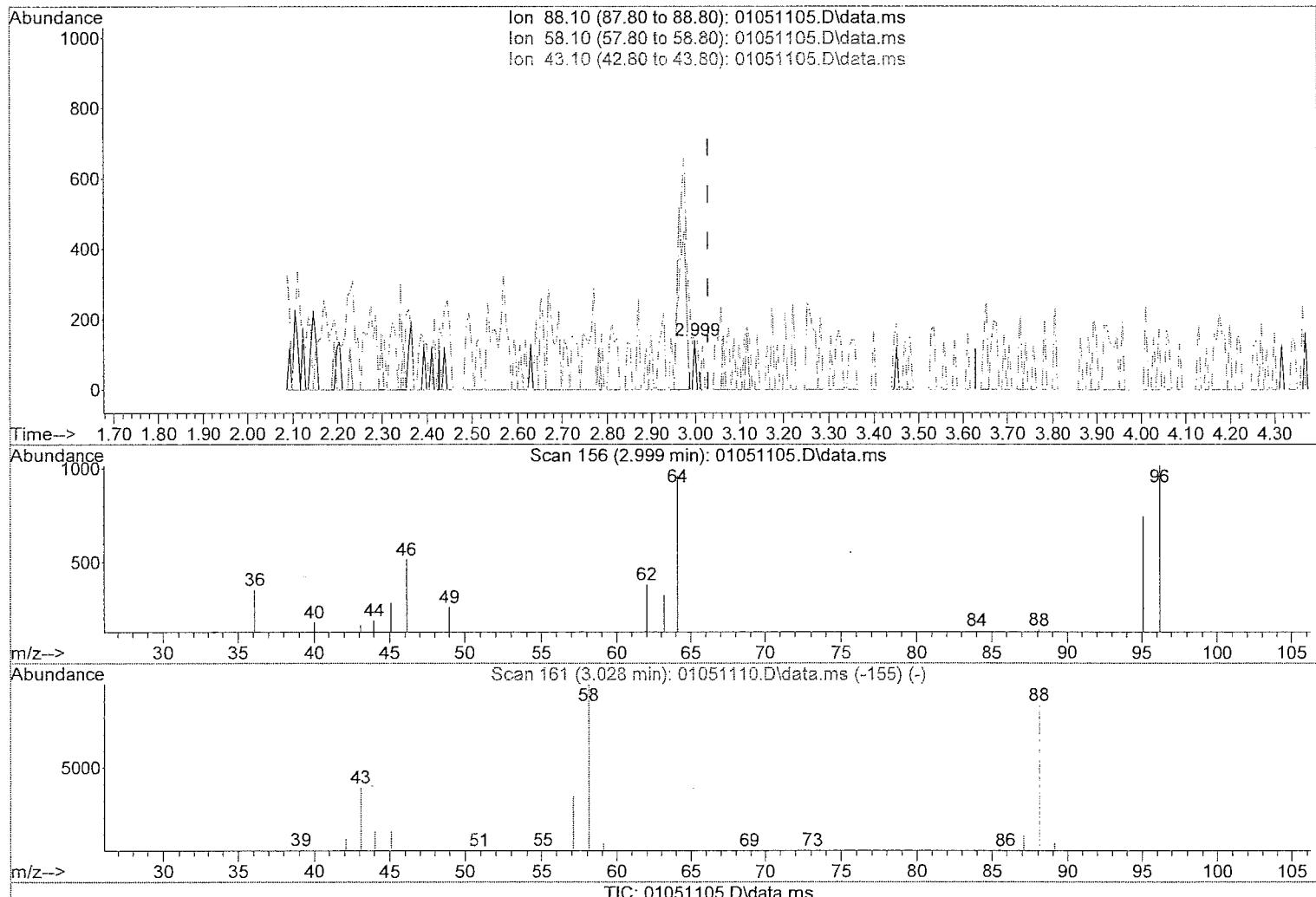
Quant Time: Jan 05 13:45:56 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 13:29:49 2011  
Response via : Initial Calibration



## Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051105.D  
 Acq On : 5 Jan 2011 10:44 am  
 Operator : CL  
 Sample : BLANK  
 Misc : 1,4-DIOXANE  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 13:29:49 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.999min (-0.029) 0.00ug/mL

response 49

Ion	Exp%	Act%
88.10	100	100
58.10	97.60	1263.27#
43.10	39.30	2171.43#
0.00	0.00	0.00

2.999  
2.999min (-0.029) 0.00ug/mL

1/20/2011

209 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1, 4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 963	96	/ 318261	20.00	ug/mL	0.02
3) 1, 4-Dichlorobenzene-d4	6. 092	152	240601	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	20080	0.62	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 016	88	7745	0.48	ug/mL	96
4) 1, 4-Dichlorobenzene	6. 104	146	19858	0.51	ug/mL	87
5) N-Nitrosodi-n-propylamine	6. 422	70	12932	0.61	ug/mL	98

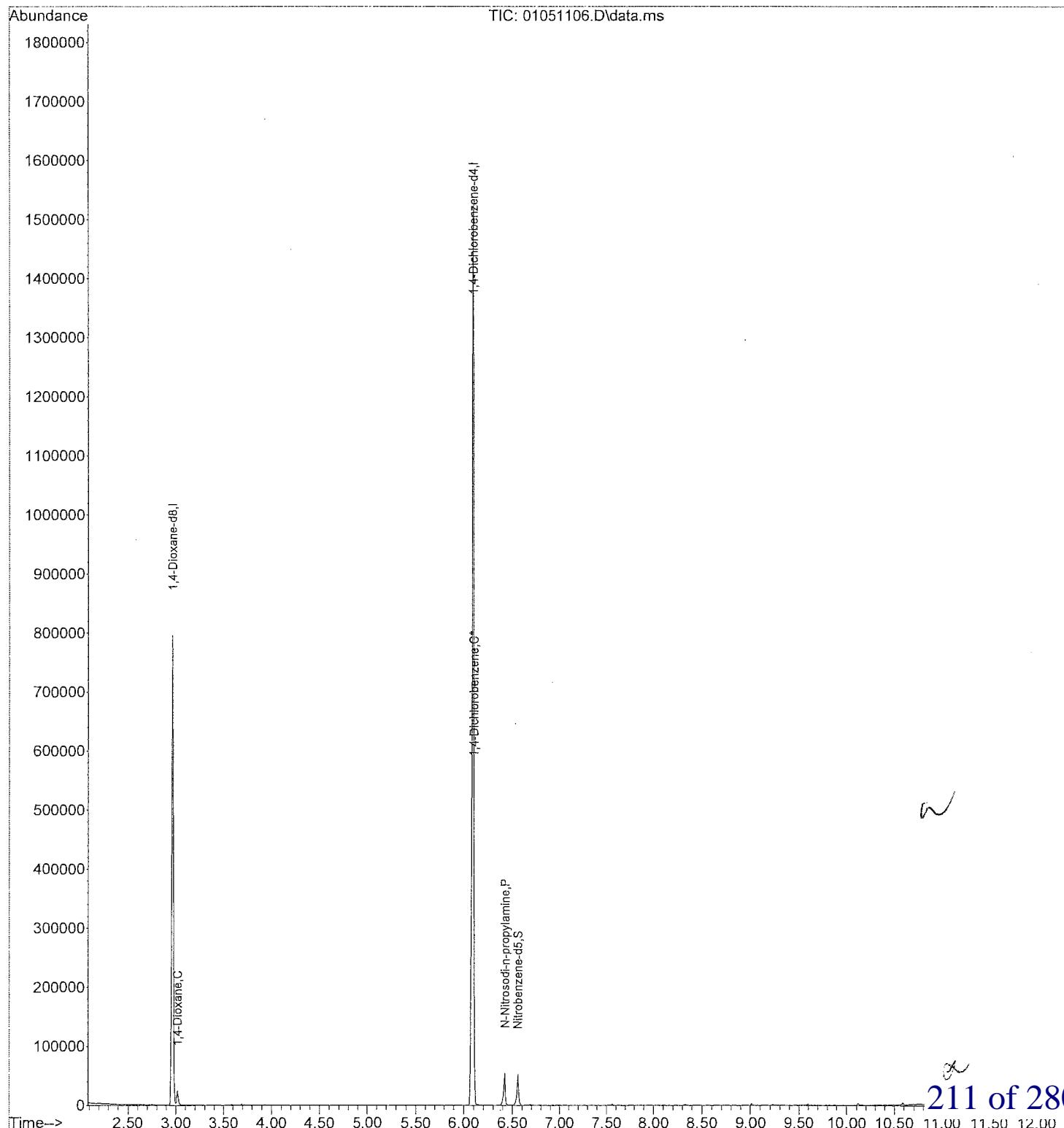
(##) = qualifier out of range (m) = manual integration (+) = signals summed

✓ ✓ ✓ ✓ ✓

210 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051106.D  
Acq On : 5 Jan 2011 11:10 am  
Operator : CL  
Sample : 0.5ug/mL PU00059  
Misc : 1, 4-DIOXANE  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051107.D  
 Acq On : 5 Jan 2011 11:32 am  
 Operator : CL  
 Sample : 1.0ug/mL PU00060  
 Misc : 1,4-DIOXANE  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.969	96	283387	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	213017	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	36439	1.28	ug/mL	0.00
Target Compounds						
2) 1,4-Dioxane	3.022	88	14877	1.04	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	35480	1.03	ug/mL	95
5) N-Nitrosodi-n-propylamine	6.422	70	23862	1.28	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

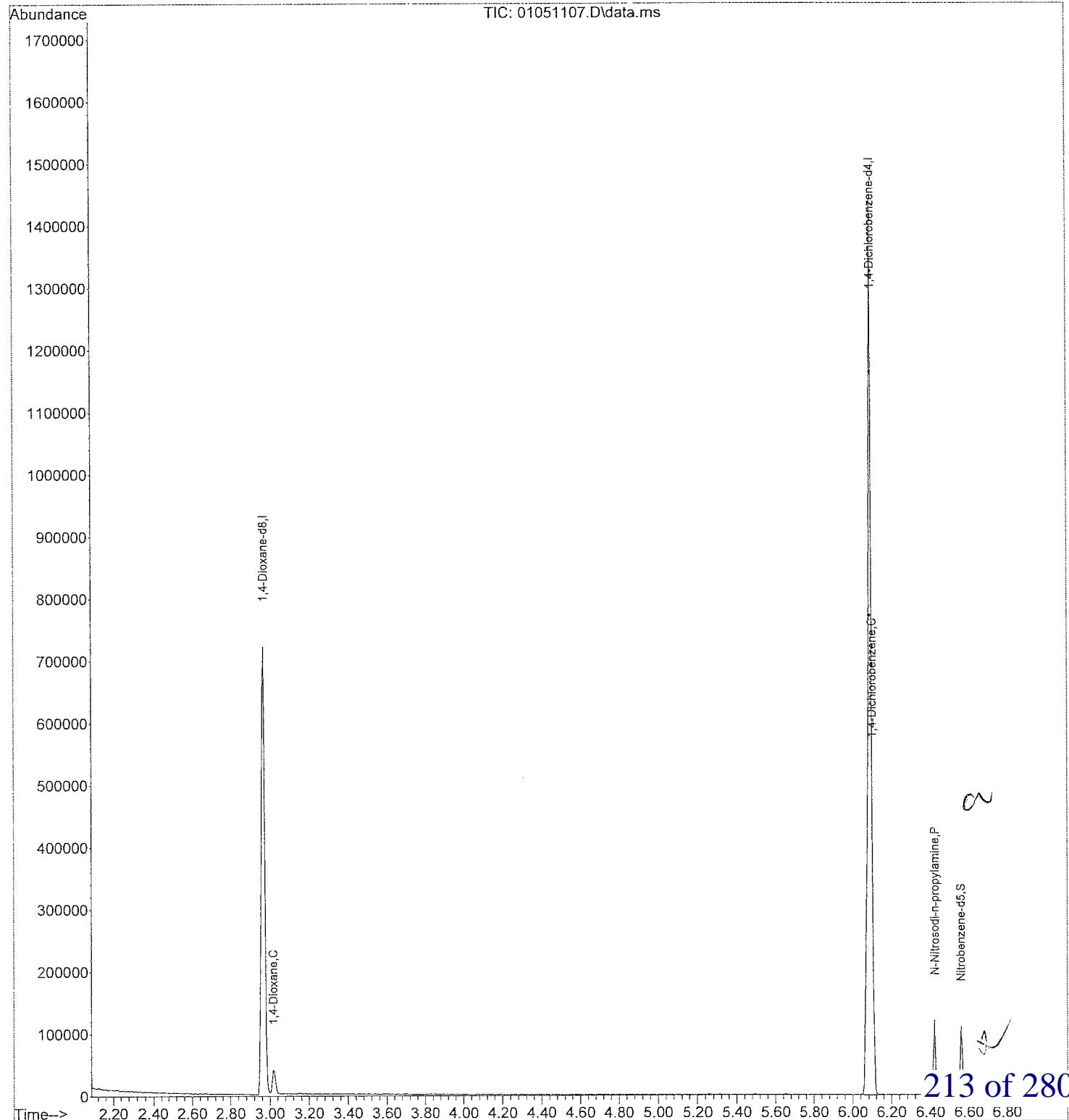
✓ 1.4.11

ANAL

212 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051107.D  
Acq On : 5 Jan 2011 11:32 am  
Operator : CL  
Sample : 1.0ug/mL PU00060  
Misc : 1,4-DIOXANE  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1, 4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	323796	20.00	ug/mL	0.03
3) 1, 4-Dichlorobenzene-d4	6. 087	152	240424	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	92526	2.87	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 022	88	34074	2.09	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 104	146	83920	2.15	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 416	70	59969	2.84	ug/mL	99

(#= qualifier out of range (m)= manual integration (+)= signals summed

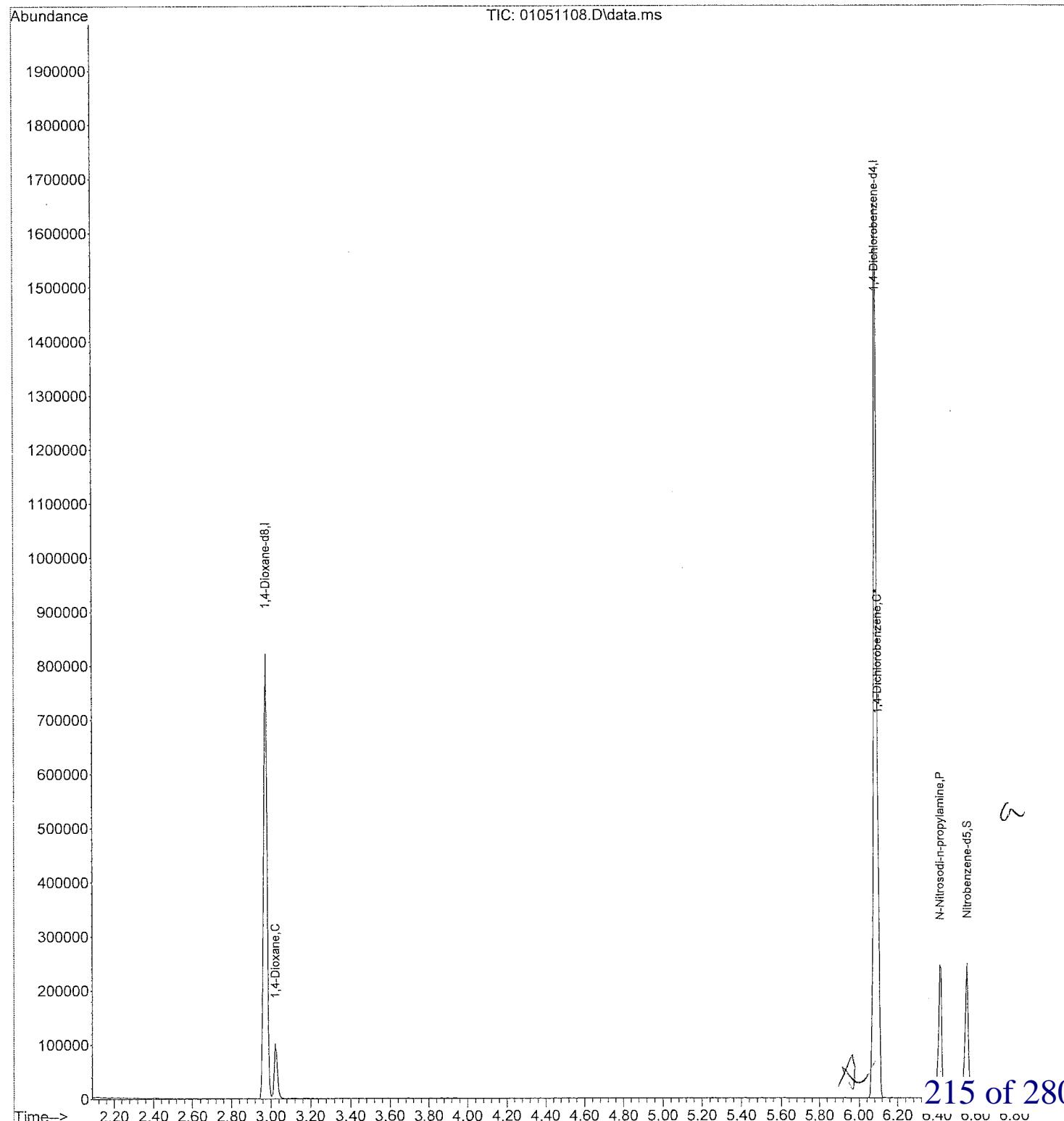
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214 of 280

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051108.D  
Acq On : 5 Jan 2011 11:46 am  
Operator : CL  
Sample : 2.0ug/mL PU00061  
Misc : 1, 4-DIOXANE  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\  
 Data File : 01051109.D  
 Acq On : 5 Jan 2011 11:59 am  
 Operator : CL  
 Sample : 4.0ug/mL PU00062  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 12:19:44 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 957	96	/304589	20. 00	ug/mL	0. 01
3) 1, 4-Dichlorobenzene-d4	6. 092	152	/229794	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	173101	5. 62	ug/mL	0. 00
Target Compounds						Qvalue
2) 1, 4-Dioxane	3. 004	88	65016	4. 24	ug/mL	100
4) 1, 4-Dichlorobenzene	6. 104	146	157766	4. 23	ug/mL	98
5) N-Nitrosodi-n-propylamine	6. 422	70	115445	5. 73	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

61.5.11

6/5/11

216 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1,4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

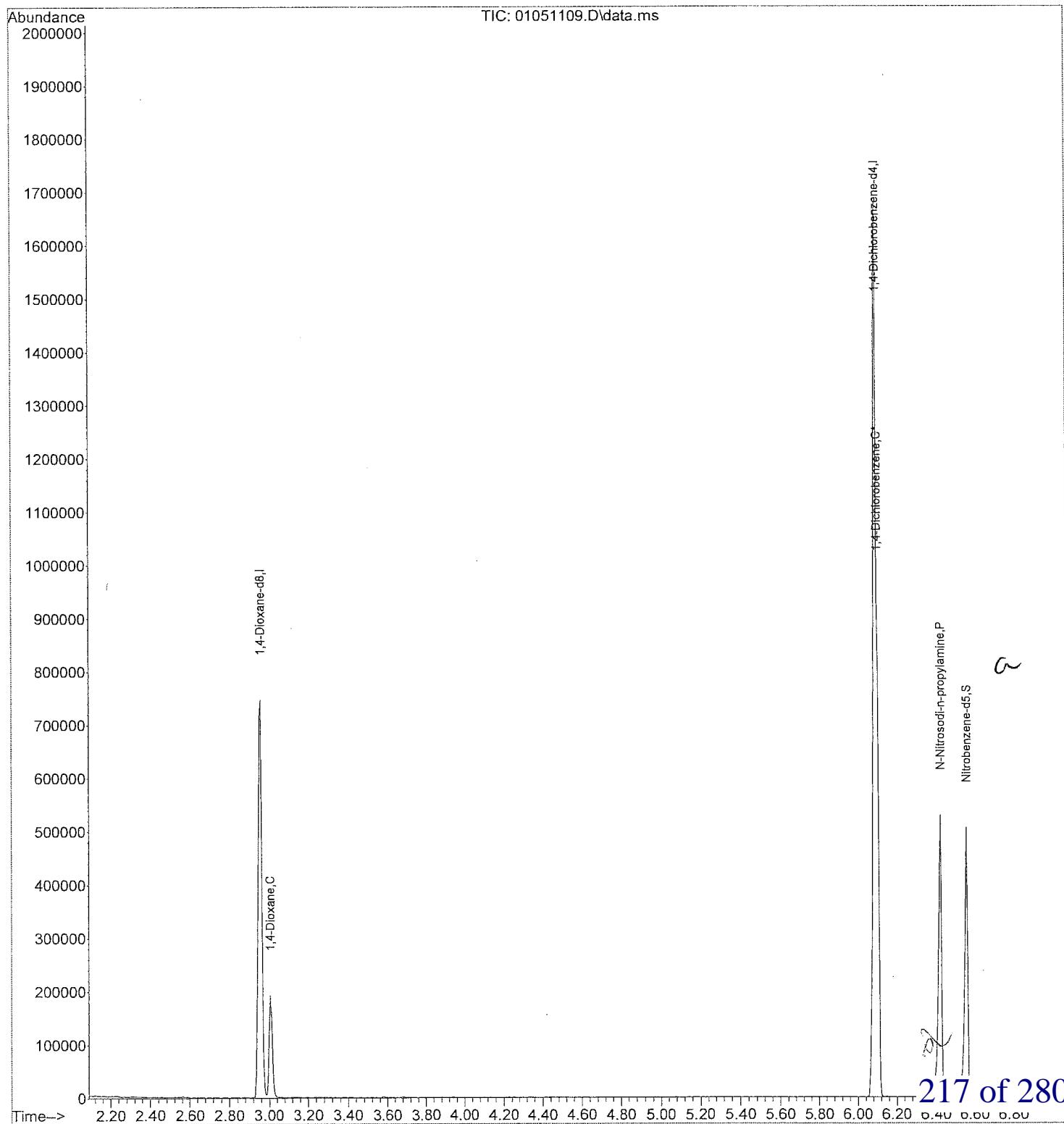
Quant Time: Jan 05 12:19:44 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270 (1, 4-DIOXANE) .CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051110.D

Acq On : 5 Jan 2011 12:12 pm

Operator : CL

Sample : 10ug/mL PU00063

Misc : 1,4-DIOXANE

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.975	96	326940	20.00	ug/mL	0.03
3) 1,4-Dichlorobenzene-d4	6.092	152	243008	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	454083	13.94	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.028	88	171569	10.42	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	404965	10.27	ug/mL	99
5) N-Nitrosodi-n-propylamine	6.422	70	304989	14.31	ug/mL	100

(##) = qualifier out of range (m) = manual integration (+) = signals summed

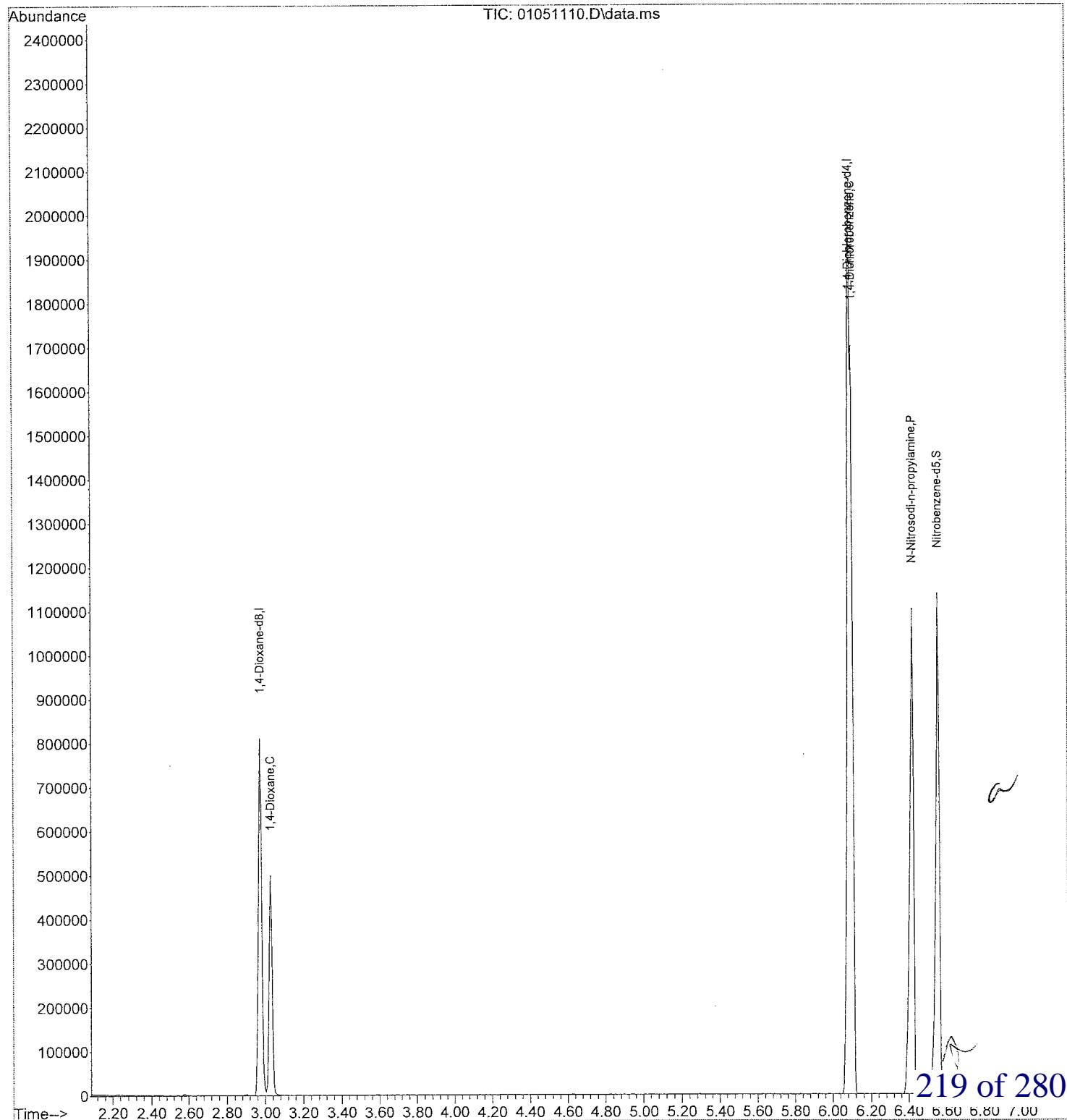
01.5"

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218 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\  
Data File : 0105110.D  
Acq On : 5 Jan 2011 12:12 pm  
Operator : CL  
Sample : 10ug/mL PU00063  
Misc : 1,4-DIOXANE  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051111.D

Acq On : 5 Jan 2011 12:25 pm

Operator : CL

Sample : 20ug/mL PU00064

Misc : 1, 4-DIOXANE

ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dioxane-d8	2. 892	96	258958	20.00	ug/mL	-0.05
3) 1, 4-Dichlorobenzene-d4	6. 092	152	185062	10.00	ug/mL	0.00
<hr/>						
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 563	82	670408	27.02	ug/mL	0.00
<hr/>						
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 951	88	261828	20.07	ug/mL	100
4) 1, 4-Dichlorobenzene	6. 104	146	613271	20.43	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 428	70	453173	27.92	ug/mL	99

(#= qualifier out of range (m)= manual integration (+)= signals summed

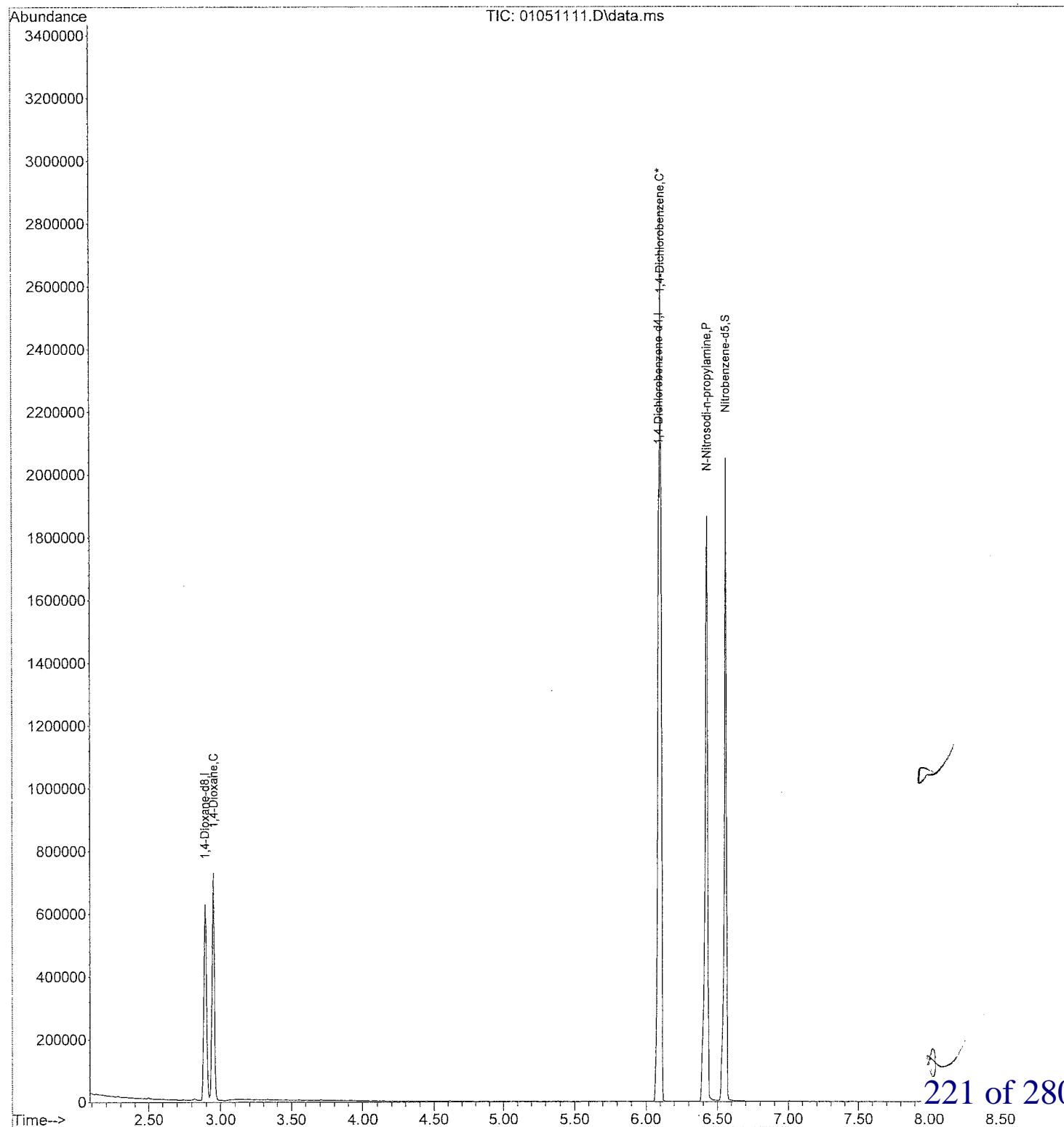
21.5.11

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220 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
Data File : 01051111.D  
Acq On : 5 Jan 2011 12:25 pm  
Operator : CL  
Sample : 20ug/mL PU00064  
Misc : 1, 4-DIOXANE  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051112.D

Acq On : 5 Jan 2011 12:41 pm

Operator : CL

Sample : 30ug/mL PU00065

Misc : 1,4-DIOXANE

ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	330882	20. 00	ug/mL	0. 03
3) 1, 4-Dichlorobenzene-d4	6. 092	152	235894	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 563	82	1276344	40. 36	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 040	88	495415	29. 72	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 104	146	1137949	29. 74	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 428	70	858130	41. 47	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

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222 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051112.D

Acq On : 5 Jan 2011 12:41 pm

Operator : CL

Sample : 30ug/mL PU00065

Misc : 1, 4-DIOXANE

ALS Vial : 12 Sample Multiplier: 1

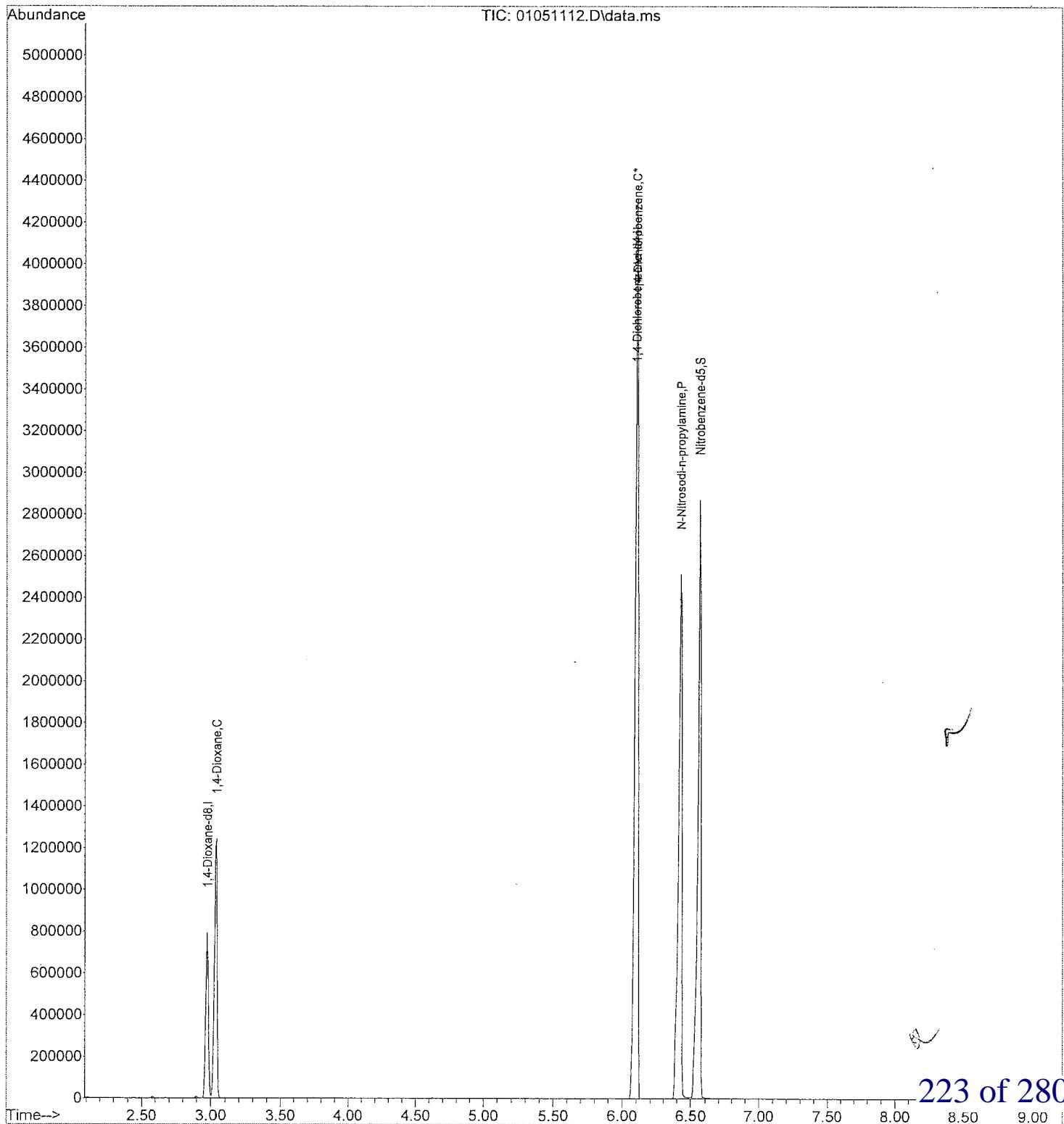
Quant Time: Jan 05 12:57:20 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



223 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1, 4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 875	96	235570	20. 00	ug/mL	-0. 07
3) 1, 4-Dichlorobenzene-d4	6. 093	152	170137	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 569	82	1198475	52. 55	ug/mL	0. 01
Target Compounds						
2) 1, 4-Dioxane	2. 940	88	479723	40. 42	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 110	146	1084666	39. 30	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 434	70	813006	54. 48	ug/mL	100

(#= qualifier out of range (m)= manual integration (+)= signals summed

✓, S.A

2/24

224 of 280

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1, 4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

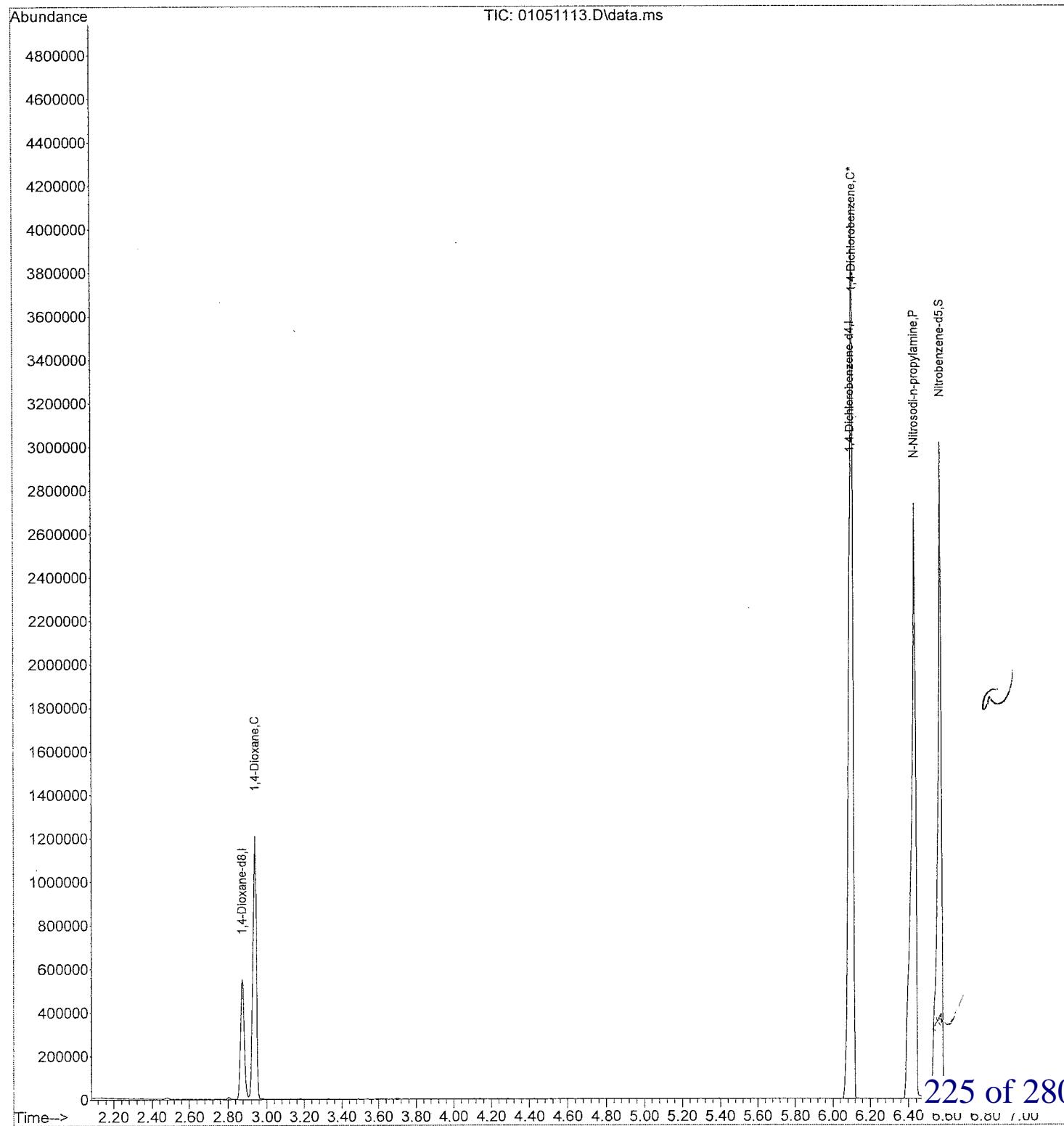
Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm.

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dioxane-d8	2. 787	96	203549m	20. 00	ug/mL	-0. 16
3) 1, 4-Dichlorobenzene-d4	6. 092	152	140662	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 581	82	2386881	126. 59	ug/mL	0. 02
Target Compounds						Qvalue
2) 1, 4-Dioxane	2. 863	88	957052m	93. 33	ug/mL	
4) 1, 4-Dichlorobenzene	6. 110	146	2103702	92. 19	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 451	70	1646696	133. 46	ug/mL	99

(#= qualifier out of range (m)= manual integration (+)= signals summed

✓ ✓ ✓ ✓ ✓

J. G. C.

226 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

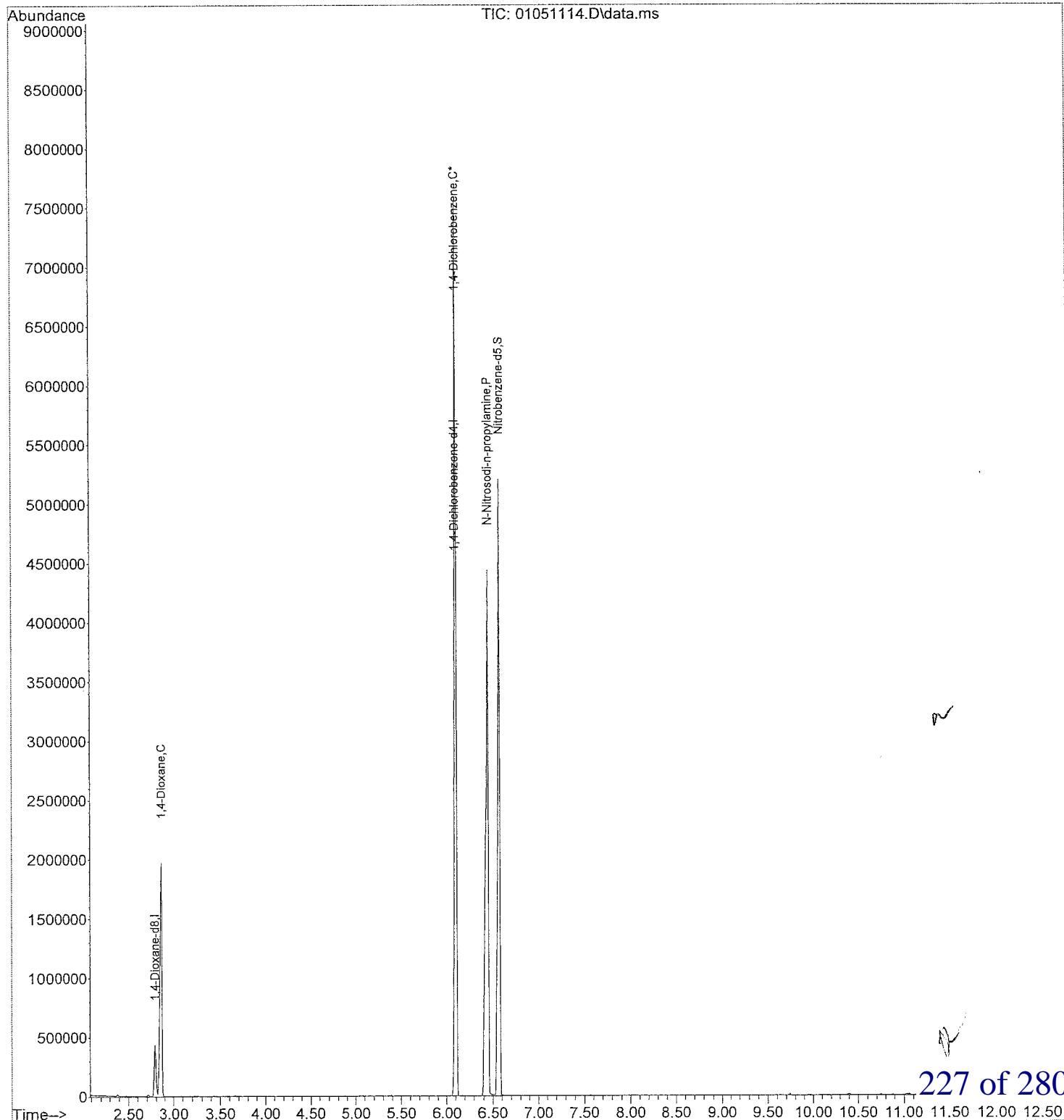
Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

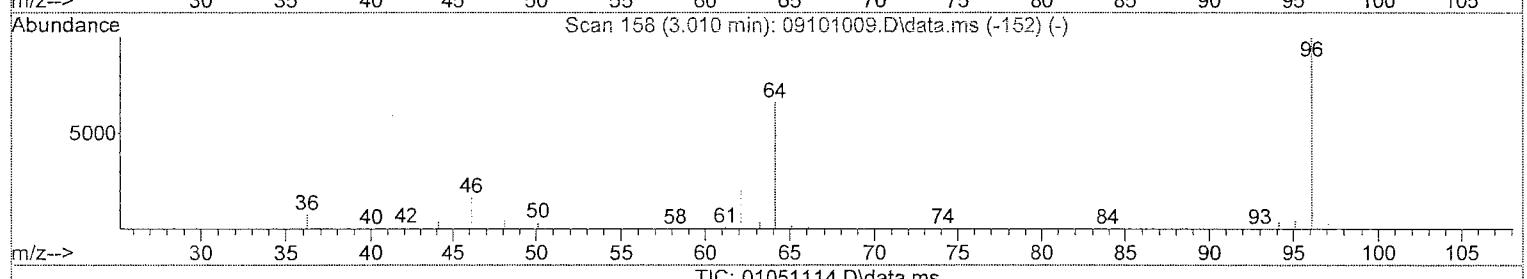
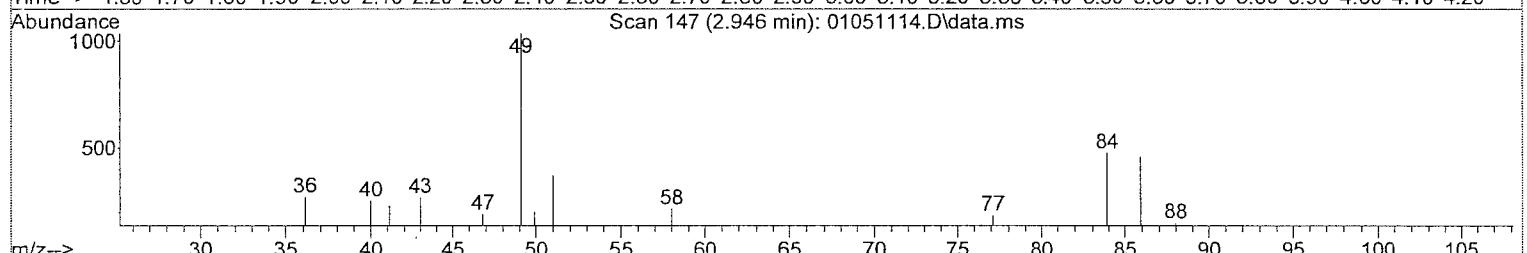
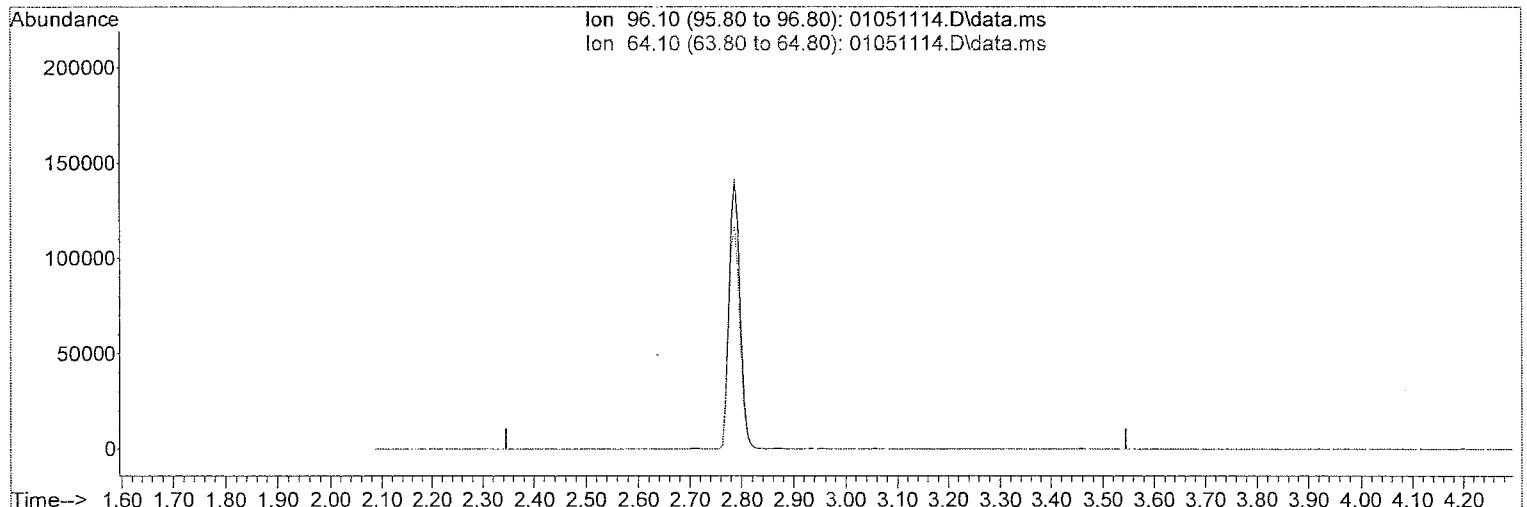
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.946min (-2.946) 0.00ug/mL

response 0

Ion	Exp%	Act%
96.10	100	0.00
64.10	83.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

B

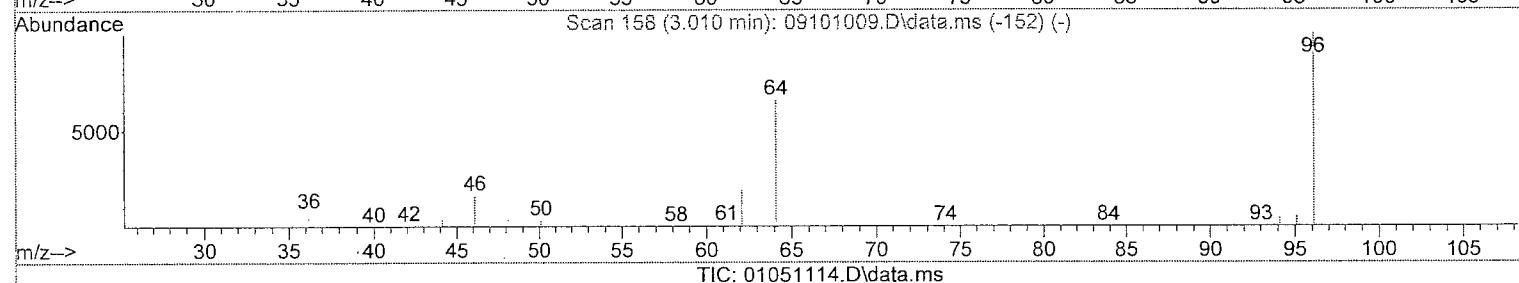
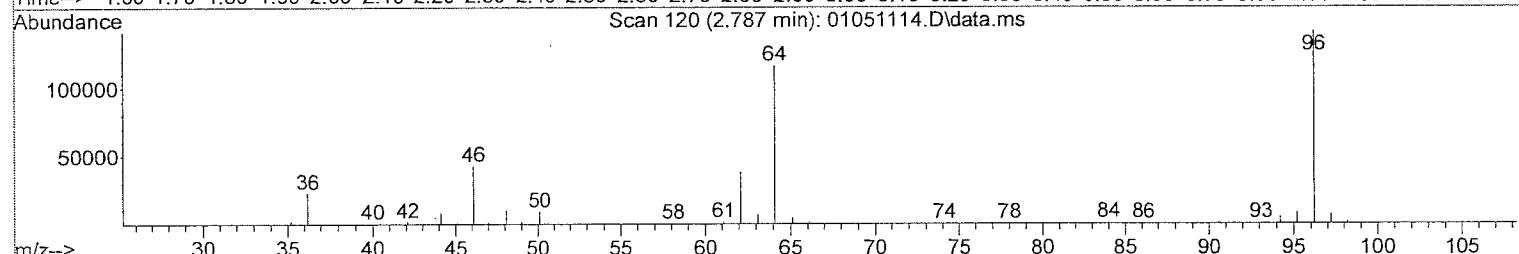
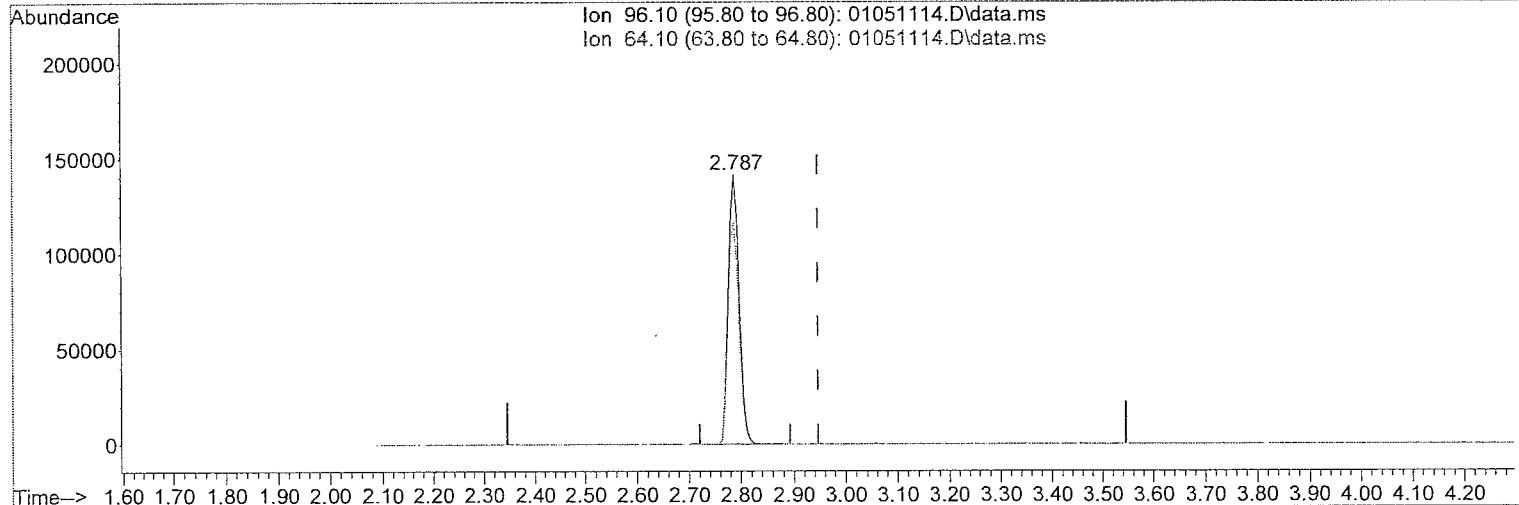
TP  
a1.5.11  
KSC

228 of 280

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\0105114  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (l)

2.787min (-0.159) 20.00ug/mL m

response 203549

Ion	Exp%	Act%
96.10	100	100
64.10	83.80	83.74
0.00	0.00	0.00
0.00	0.00	0.00

A

203549

a 1-5-11

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

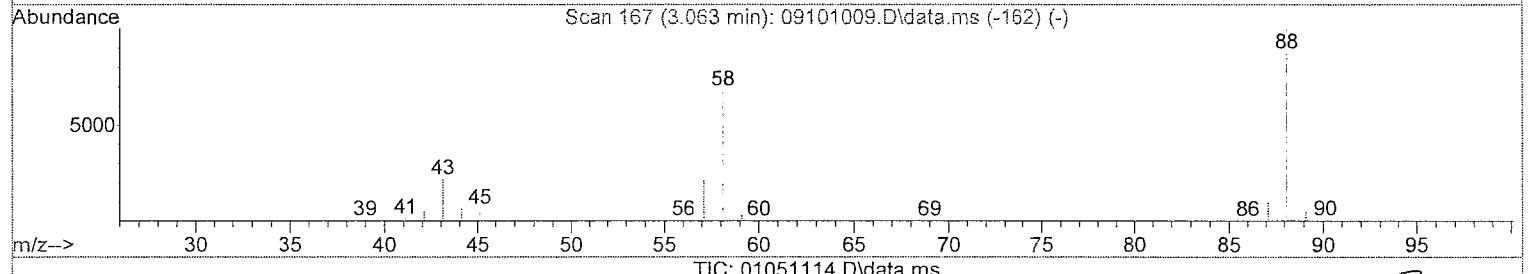
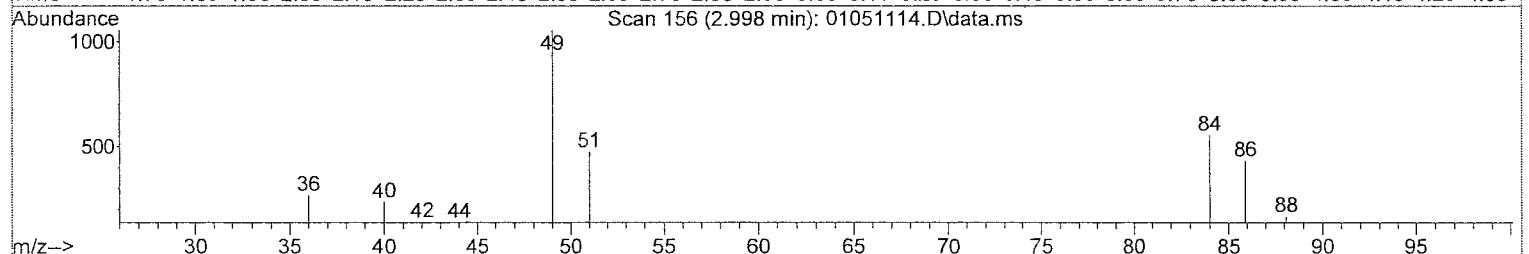
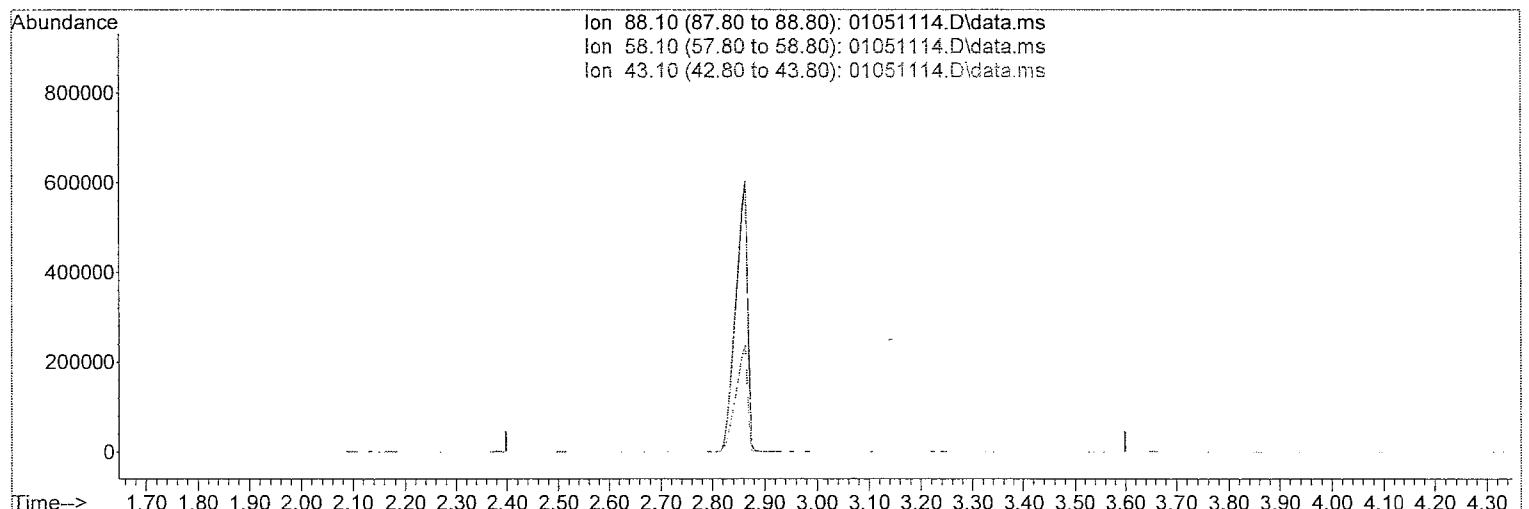
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.998min (-2.998) 0.00ug/mL

response 0

Ion	Exp%	Act%
-----	------	------

88.10	100	0.00
-------	-----	------

58.10	97.70	0.00#
-------	-------	-------

43.10	38.10	0.00#
-------	-------	-------

0.00	0.00	0.00
------	------	------

B  
DD

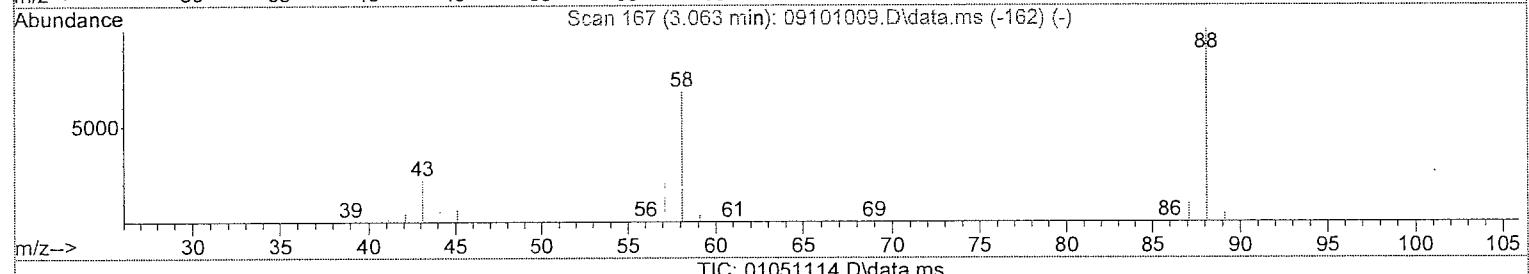
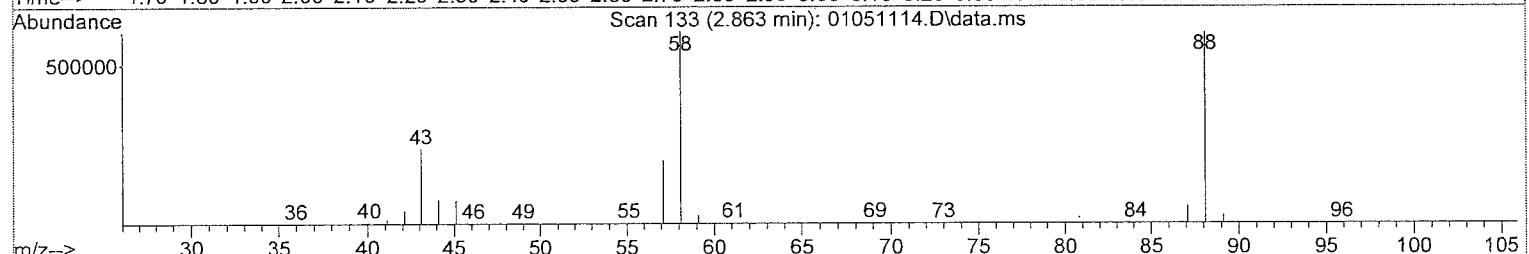
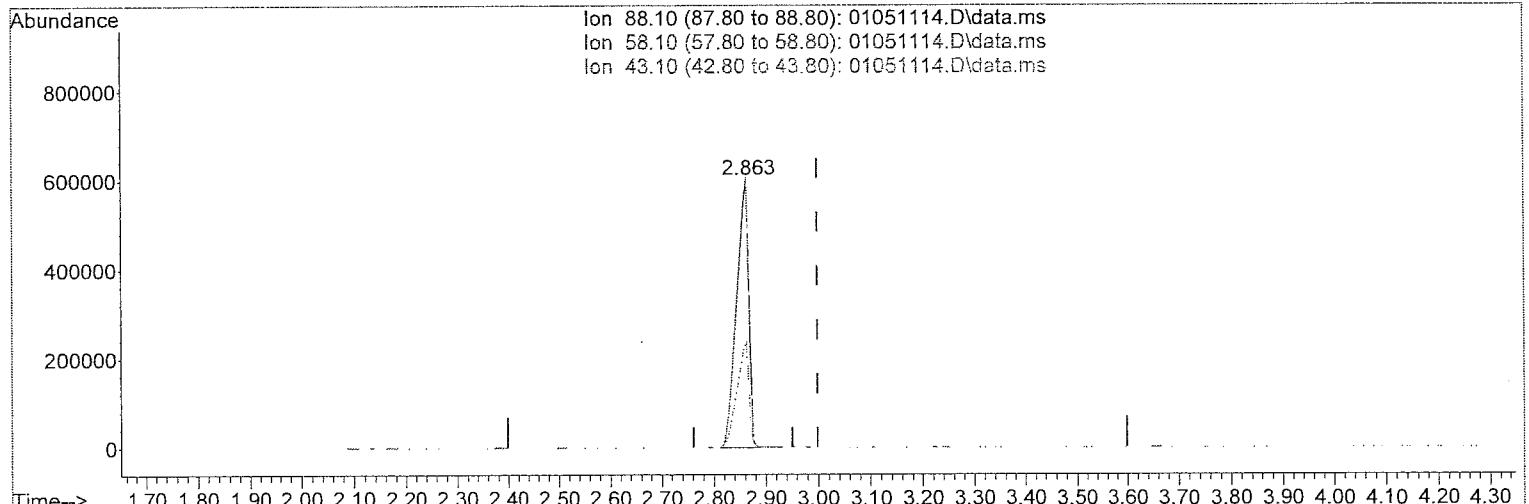
Jan 5 '11

1/28/2011  
230 of 280

Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.863min (-0.135) 93.33ug/mL m

response 957052

Ion	Exp%	Act%
88.10	100	100
58.10	97.70	100.08
43.10	38.10	38.93
0.00	0.00	0.00

ap. 5/11

MS/MS

231 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051115.D

Acq On : 5 Jan 2011 1:33 pm

Operator : CL

Sample : QCS10ug/mL PU00068

Misc : 1,4-DIOXANE

ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 05 13:43:34 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 946	96	322333	20. 00	ug/mL	-0. 03
3) 1, 4-Dichlorobenzene-d4	6. 086	152	233788	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	43	0. 00	ug/mL	0. 00
Target Compounds						
2) 1, 4-Dioxane	2. 998	88	165372	10. 08	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 081	146	386	0. 01	ug/mL#	1

(#= qualifier out of range (m)= manual integration (+)= signals summed

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051115.D

Acq On : 5 Jan 2011 1:33 pm

Operator : CL

Sample : QCS10ug/mL PU00068

Misc : 1, 4-DIOXANE

ALS Vial : 15 Sample Multiplier: 1

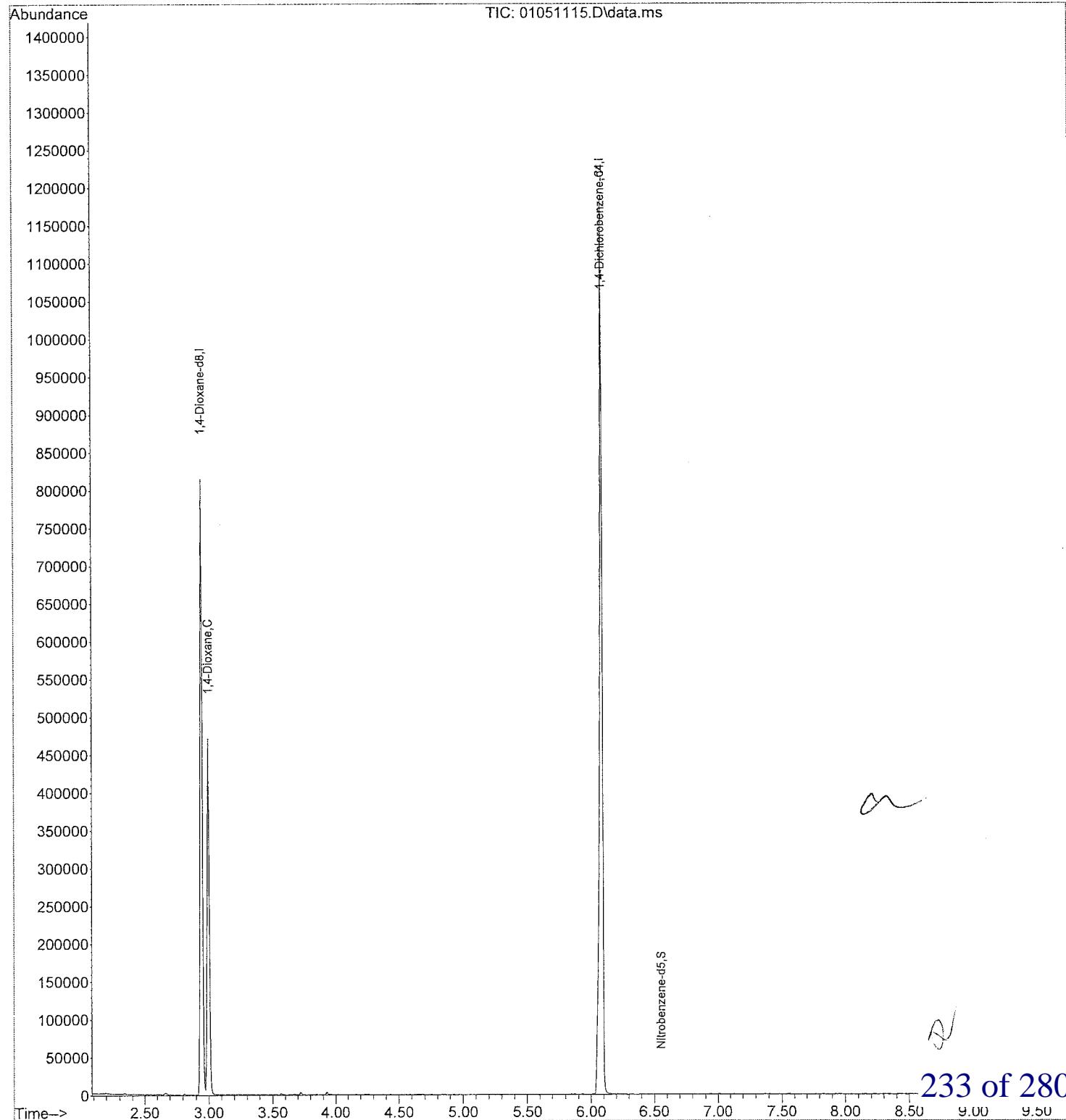
Quant Time: Jan 05 13:43:34 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL DATA

METHOD: EPA 8270C

DATE: 03/16/11

WORK ORDER: PUC0829-01

**Attachment 9**  
**ANALYTICAL DATA REVIEW CHECKLIST**

SOP PE-SVD-014 R.1  
 1, 4-Dioxane by Modified EPA 8270C

Analyst:	Batch ID#	Date Analyzed:		
Description		Yes	No	NA <sup>1</sup>
1.	Tune 3:45 PM 3-16-11			
-	DFTPP (50 ng) meets method criteria?			
-	Tailing – Benzidine (Base/Neutrals) ≤ 3.0?			
-	All samples analyzed <12 hours from time of Tune?	✓		
2.	Calibration Curve (minimum of 5 levels)			
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?			
-	CCC 1,4-Dichlorobenzene ≤30%			
-	All compounds RSD ≤20% or linear/quadratic $r^2 \geq 0.99$			
-	QCS recovered ± 30%			
-	Date of Initial Calibration: 01/05/11 Instrument: CCPS14			
3.	Retention Times Updated?		✓	
4.	CCVs all analytes recovered within 20% (includes CCC 1, 4-Dichlorobenzene)?			
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?			
-	Internal Standard RT ± 0.5 min. from 10 ppb std. in ICAL?			
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?			
-	Analyte RRTs ± 0.06 from 50 ppb std. in ICAL?			
5.	Method Blank extracted with batch?			
-	All target analytes recovered <RL?			
6.	LCS/LCSD extracted with batch?			
-	Recoveries within Laboratory Limits?			
-	RPDs ≤ Laboratory Limits?			
7.	MS/MSD extracted with batch?			
-	Recoveries within Historical Limits?			
-	RPDs Laboratory Limits?			
8.	Samples extracted within 7 days from collection?			
-	Samples analyzed within 40 days from extraction?			
-	Internal Standard RT ± 0.5 min. from CCV?			
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?			
-	Maximum of 20 samples in batch?			
-	Surrogate recoveries within Historical Limits?			
Comments: IS Element ID(s): Q102037 (1,4-PCB-d4)  me RE				

Review Signatures:	Analyst:	Chai	Date:	3/21/11
	Reviewer:	Amy Lewinick	Date:	3/21/11

<sup>1</sup> NA: Not Applicable

TestAmerica  
Phoenix

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\msdchem\1\GCMS14\sequence\031611.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\031611\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway

( ) Reprocessing Only ( ) Don't Inject

3/17/11

Line	Sample Name/Misc Info
1)	Sample 1 03161101 DB5MS14 DCM
2)	Sample 2 03161102 DB5MS14 DCM
3)	Sample 3 03161103 DB5MS14 DCM
4)	Sample 4 03161104 DB5MS14 25ng tune std pu01447
5)	Sample 5 03161105 DIOXANE DCM
6)	Sample 6 03161106 DIOXANE 10ug/mL 14-diox-01520
7)	Sample 7 03161107 DIOXANE DCM
8)	Sample 8 03161108 DIOXANE 11C0526-BLK1
9)	Sample 9 03161109 DIOXANE 11C0526-BS1
10)	Sample 10 03161110 DIOXANE 11C0526-BSD1
11)	Sample 11 03161111 DIOXANE PUC0730-01
12)	Sample 12 03161112 DIOXANE PUC0731-01
13)	Sample 13 03161113 DIOXANE PUC0731-02
14)	Sample 14 03161114 DIOXANE PUC0731-03
15)	Sample 15 03161115 DIOXANE PUC0731-04
16)	Sample 16 03161116 DIOXANE PUC0827-01
17)	Sample 17 03161117 DIOXANE PUC0827-02
18)	Sample 18 03161118 DIOXANE PUC0827-03
19)	Sample 19 03161119 DIOXANE PUC0827-04
20)	Sample 20 03161120 DIOXANE PUC0827-05
21)	Sample 21 03161121 DIOXANE PUC0829-01
22)	Sample 22 03161122 DIOXANE DCM
23)	Sample 23 03161123 DIOXANE DCM

3/17/11

Sequence Reviewed By: an

Date: 3/17/11

236 of 280

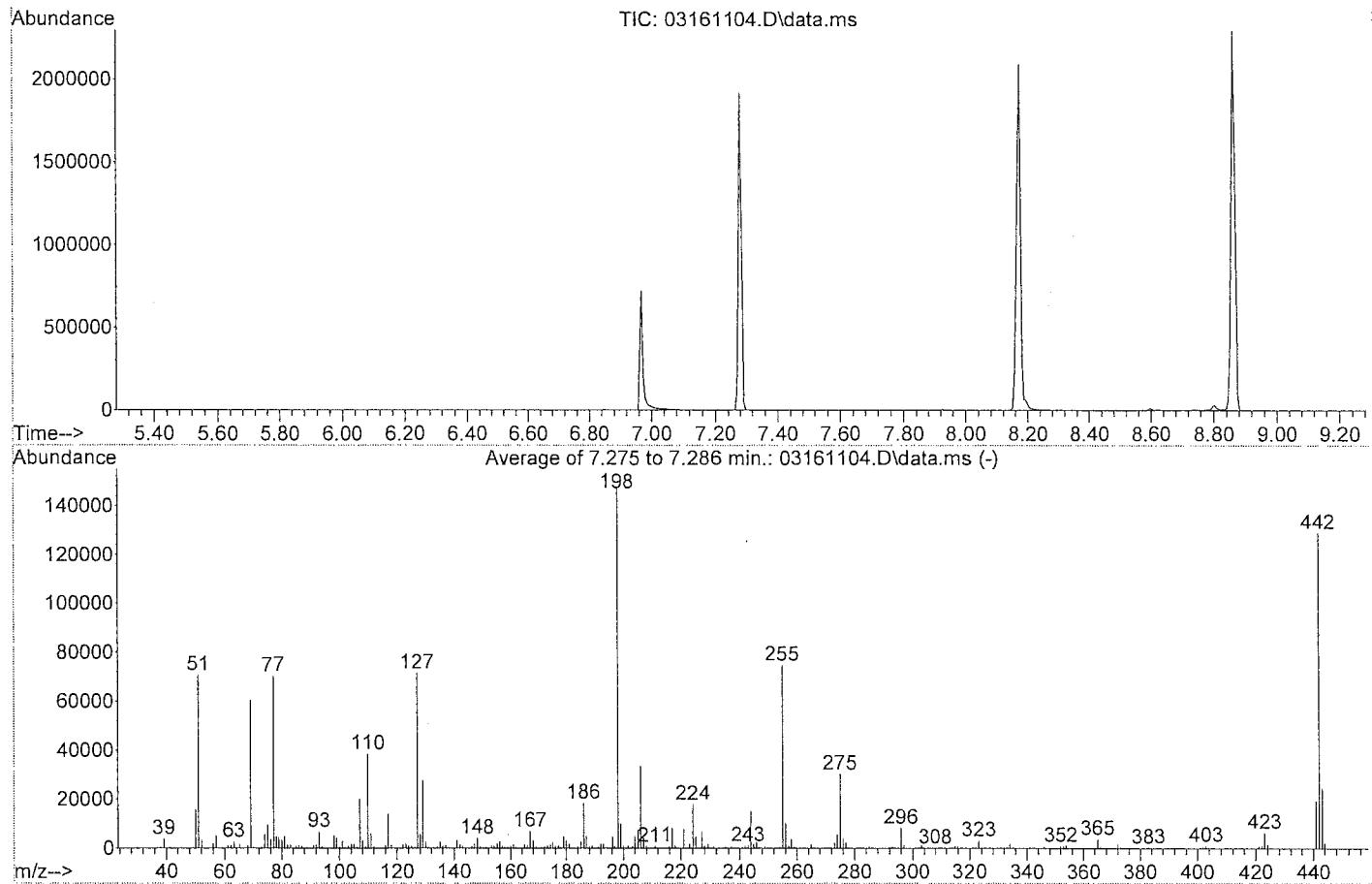
Date Analyzed: 3/17/11 Analyst: an Date Run: 3-16-

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161104.D  
 Acq On : 16 Mar 2011 3:45 pm  
 Operator : CL  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Thu Feb 17 11:44:41 2011



AutoFind: Scans 951, 952, 953; Background Corrected with Scan 946

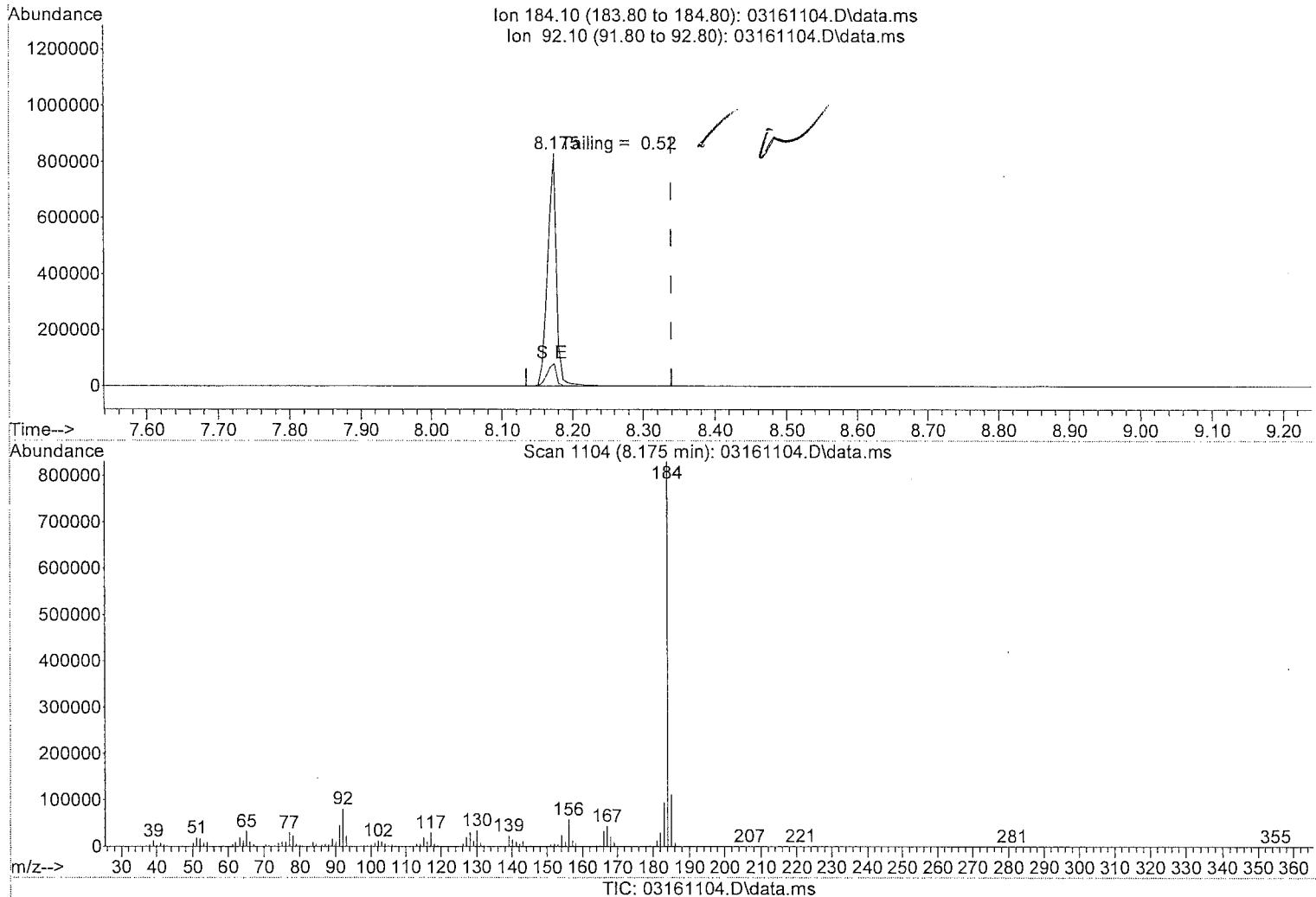
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.8	70538	PASS
68	69	0.00	2	1.4	851	PASS
69	198	0.00	100	41.0	60376	PASS
70	69	0.00	2	0.5	304	PASS
127	198	40	60	48.4	71312	PASS
197	198	0.00	1	0.5	768	PASS
198	198	100	100	100.0	147437	PASS
199	198	5	9	6.8	10036	PASS
275	198	10	30	20.5	30203	PASS
365	198	1	100	2.5	3730	PASS
441	443	0.01	100	78.5	19368	PASS
442	198	40	100	87.4	128890	PASS
443	442	17	23	19.1	24671	PASS

237 of 280  
18/3/2011

Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031611.D  
 Data File : 03161104.D  
 Acq On : 16 Mar 2011 3:45 pm  
 Operator : CL  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 18 18:23:05 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\TUNE8270.M  
 Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 QLast Update : Thu Feb 17 11:44:41 2011  
 Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.175min (-0.164) 9.22

response 724239

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.38
0.00	0.00	0.00
0.00	0.00	0.00

238 of 280

## Quantitation Report (QT Reviewed)

Data Path : D:\Ymsdchem\Y1\GCMS14\DATA\031611\  
 Data File : 03161106.D  
 Acq On : 16 Mar 2011 4:37 pm  
 Operator : CL  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011  
 Quant Method : D:\Ymsdchem\Y1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 698	96	236131	20.00	ug/mL	-0. 05
3) 1, 4-Dichlorobenzene-d4	5. 992	152	205085	10.00	ug/mL	-0. 02
<b>System Monitoring Compounds</b>						
6) Nitrobenzene-d5	6. 463	82	345840	9.41	ug/mL	-0. 02
<b>Target Compounds</b>						
2) 1, 4-Dioxane	2. 751	88	128882	10.73	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 010	146	352026	10.44	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 328	70	235737	9.62	ug/mL	99

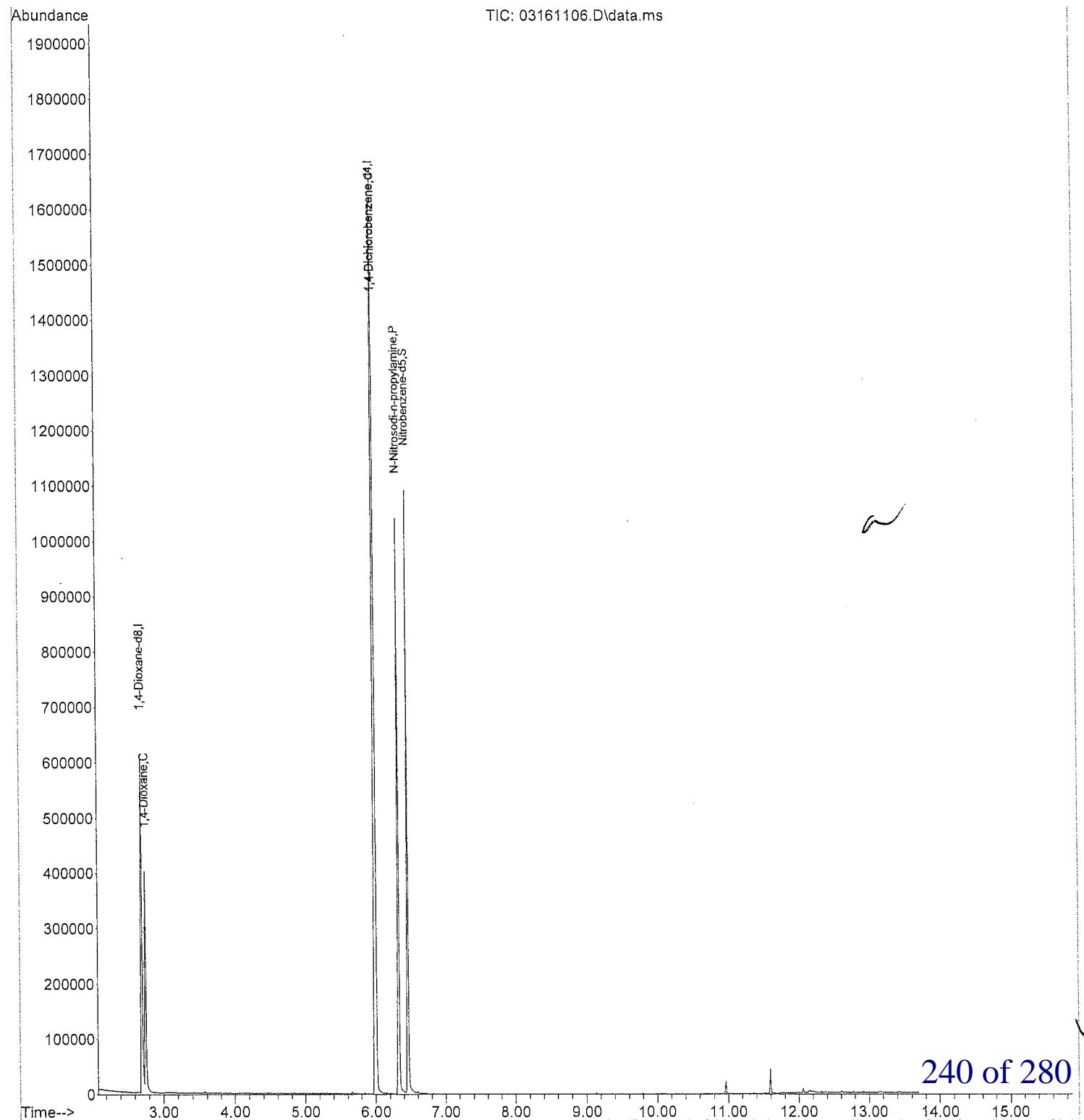
(#) = qualifier out of range (m) = manual integration (+) = signals summed

239 of 280

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\Y  
Data File : 03161106.D  
Acq On : 16 Mar 2011 4:37 pm  
Operator : CL  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14 / MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.746	1.000	A	1	A	B
2 C	1,4-Dioxane	88	2.793	1.017	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.010	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.028	1.003	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.345	1.056	A	1	A	B
6 S	Nitrobenzene-d5	82	6.481	1.078	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

010511D.M Wed Mar 16 19:20:09 2011

3/21/11

3/21/11

# Evaluate Continuing Calibration Report

Data Path : D:\msdchem\1\GCMS14\DATA\031611\

Data File : 03161106.D

Acq On : 16 Mar 2011 4:37 pm

Operator : CL

Sample : 10ug/mL 14-diox-01520

Misc : CCV

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 19:19:17 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 40% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 400%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1, 4-Dioxane-d8	1.000	1.000	0.0	72	-0.05
2 C	1, 4-Dioxane	1.018	1.092	-7.3	75	-0.04
3 I	1, 4-Dichlorobenzene-d4	1.000	1.000	0.0	84	-0.02
4 C*	1, 4-Dichlorobenzene	1.644	1.716	-4.4	87	-0.02
5 P	N-Nitrosodi-n-propylamine	1.195	1.149	3.8	77	-0.02
6 S	Nitrobenzene-d5	1.792	1.686	5.9	76	-0.02

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

✓ 3-18-11

✓ 3-21-11

242 of 280

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 DIOX010511.M

	CCV RESPONSE	ICAL RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	205085 ✓	243008 ✓	121504	486016	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	6.09	5.59	6.59	<-PASS

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 Misc Info CCV  
 Instrument Name GCMS14

NAME	RT	010511.M / AGREE AGREE PASS/FAIL			
		CCV RRT	Value (Target/IS)	-0.06	0.06
IS 1,4-Dioxane-d8	2.698				
1,4-Dioxane	2.751	1.0196	1.0178	0.9578	1.0778 <-PASS
IS 1,4-Dichlorobenzene-d4	5.992				
1,4-Dichlorobenzene	6.010	1.0029	1.0019	0.9419	1.0619 <-PASS
N-Nitrosodi-n-propylamine	6.328	1.0559	1.0541	0.9941	1.1141 <-PASS
Nitrobenzene-d5	6.463	1.0785	1.0763	1.0163	1.1363 <-PASS

3/16/11

M3/21/11

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03161106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 16:37  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	205085 ✓	205085 ✓	102542.5	410170	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99 ✓	5.49	6.49	<-PASS

*Daily update*  
*3/18/11*

*MZL/H*

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031611\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 12:58:11 2011

Response Via : Continuing Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	20	10	D:\msdchem\1\GCMS14\DATA\031611\03161106.D
2	CC	20	10	D:\msdchem\1\GCMS14\DATA\031611\03161106.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Mar 21 12:57 2011	Mar 21 12:57 2011	16 Mar 2011 4:37 pm
2	CC	Mar 21 12:58 2011	Mar 21 12:57 2011	16 Mar 2011 4:37 pm

031611\_D8.M Mon Mar 21 12:58:22 2011

3/21/11

3/21/11

Response Factor Report GCMS14

Method Path : D:\msdchem\Y1\GCMS14\METHODS\14DIOXD8\

Method File : 031611\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 12:58:11 2011

Response Via : Continuing Calibration

Calibration Files

1 =03161106.D

	Compound	1	Avg	%RSD	
1)	I 1,4-Dichlorobenzen...		ISTD		
2)	1,4-Dioxane-d8		0.576	0.00	

(#) = Out of Range

an 21-1  
an 21-1

K. S. 21-1

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\  
Method File : 031611\_D8.M  
Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
Last Update : Mon Mar 21 12:58:11 2011  
Response Via : Continuing Calibration

Total Cpnds : 2

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I 1,4-Dichlorobenzene-d4	152	5.992	1.000	A	0	A	B
2	1,4-Dioxane-d8	96	2.698	0.450	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

031611\_D8.M Mon Mar 21 12:58:39 2011

✓ 3/21/11

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161106.D  
 Acq On : 16 Mar 2011 4:37 pm  
 Operator : CL  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 12:58:48 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	205085	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.698	96	236131	20.00	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

upder

ans. 21-1

3/21/11

249 of 280

Data Path : D:\msdchem\1\GCMS14\DATA\031611\

Data File : 03161106.D

Acq On : 16 Mar 2011 4:37 pm

Operator : CL

Sample : 10ug/mL 14-diox-01520

Misc : CCV

ALS Vial : 6 Sample Multiplier: 1

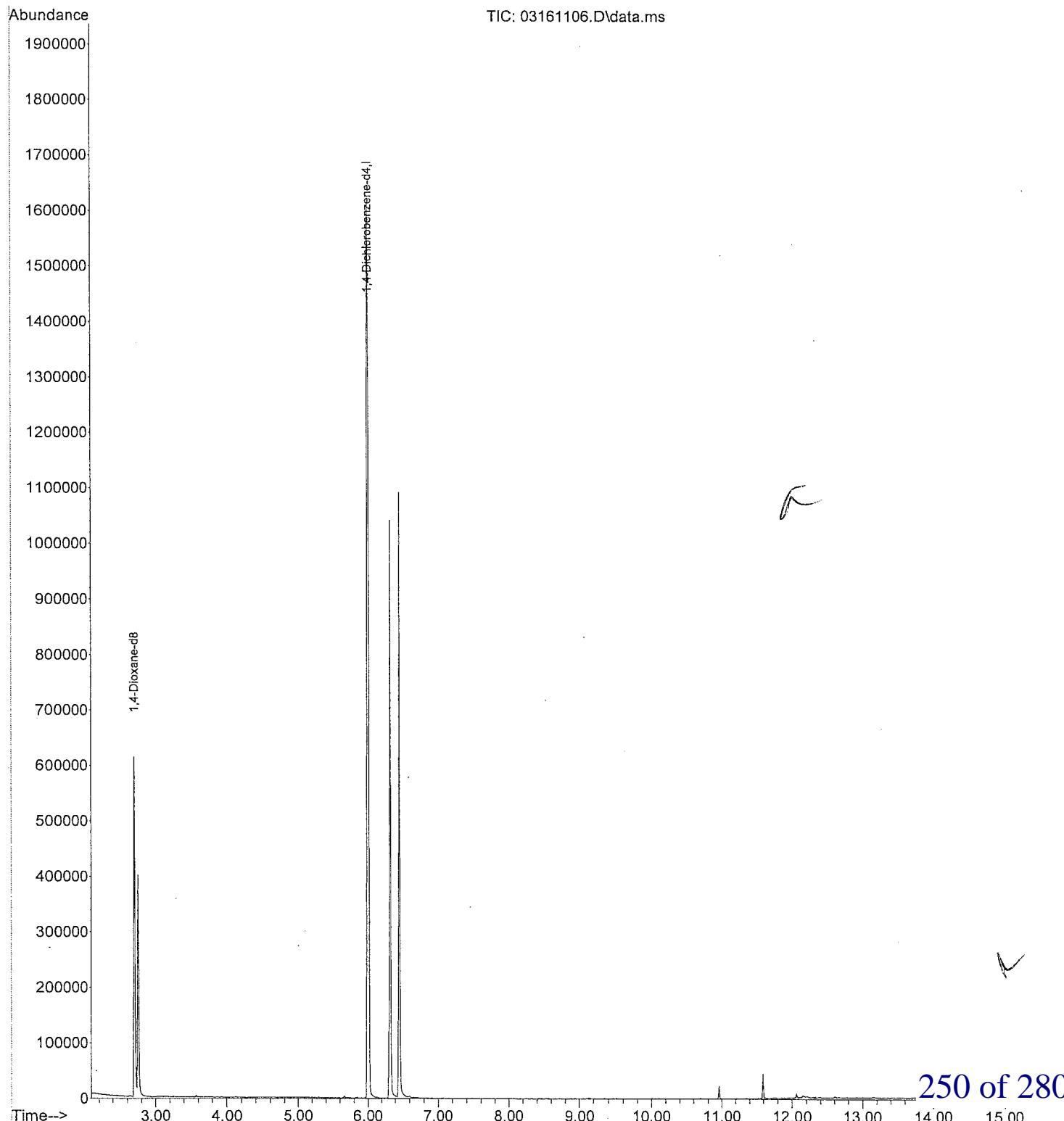
Quant Time: Mar 21 12:58:48 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 12:58:11 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report

*(Not Reviewed)*

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161108.D  
 Acq On : 16 Mar 2011 6:31 pm  
 Operator : CL  
 Sample : 11C0526-BLK1  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 17 10:06:10 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.793	96	179535	20.00	ug/mL	0.05
3) 1, 4-Dichlorobenzene-d4	5.993	152	214464	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.463	82	604425	15.73	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2.734	88	53	0.01	ug/mL#	1
4) 1, 4-Dichlorobenzene	6.004	146	720	0.02	ug/mL#	1

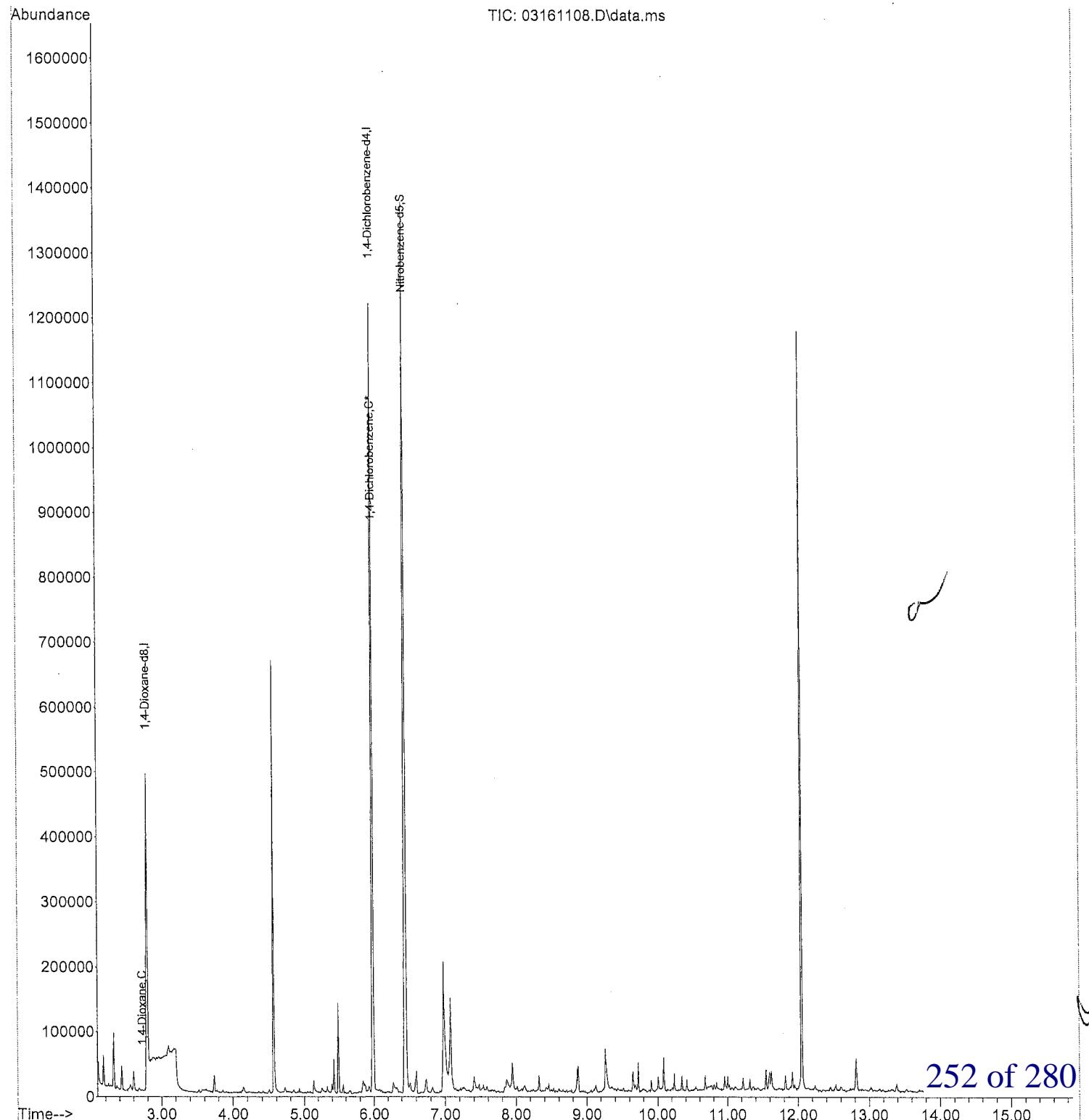
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*3/11/11*

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 17 10:06:10 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0526-BLK1  
 Data File Name 03161108.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 18:31  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	214464	205085	102542.5	410170	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

3/21/11  
253 of 280  
3/17/2011 10:15 AM

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611  
 Data File : 03161108.D  
 Acq On : 16 Mar 2011 6:31 pm  
 Operator : CL  
 Sample : 11C0526-BLK1  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 13:01:38 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.993	152	214464	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.793	96	179535	14.54	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

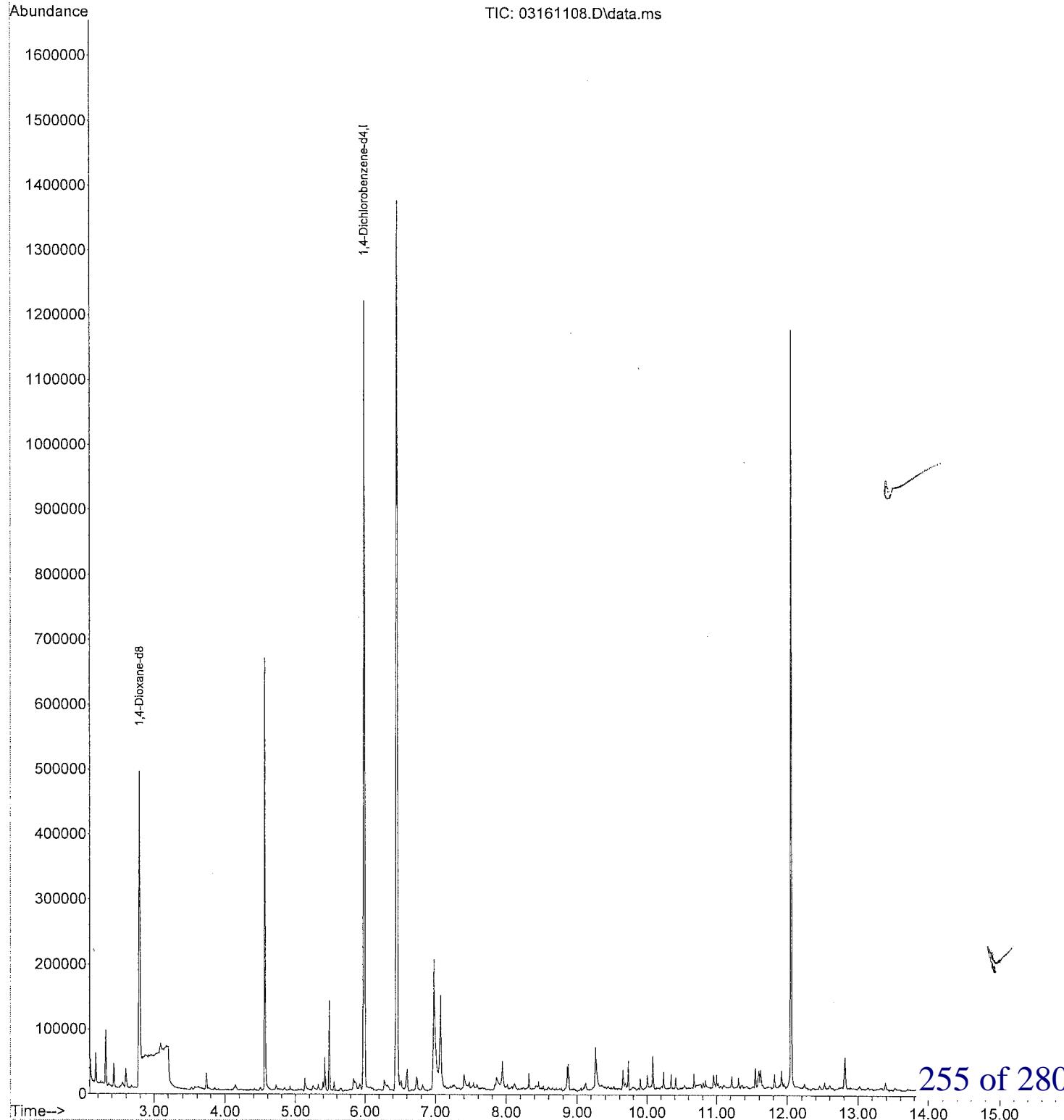
3/21/11

254 of 280

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
Data File : 03161108.D  
Acq On : 16 Mar 2011 6:31 pm  
Operator : CL  
Sample : 11C0526-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 13:01:38 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\

Data File : 03161109.D

Acq On : 16 Mar 2011 6:58 pm

Operator : CL

Sample : 11C0526-BS1

Misc :

ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:23:39 2011

Quant Method : D:\msdcchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 852	96	162348m	20. 00	ug/mL	0. 11
3) 1, 4-Dichlorobenzene-d4	5. 992	152	218822	10. 00	ug/mL	-0. 02
System Monitoring Compounds				/		
6) Nitrobenzene-d5	6. 463	82	582739	14. 86	ug/mL	-0. 02
Target Compounds				/		
2) 1, 4-Dioxane	2. 910	88	172534m	20. 88	ug/mL	Qvalue
4) 1, 4-Dichlorobenzene	6. 004	146	619	0. 02	ug/mL#	1

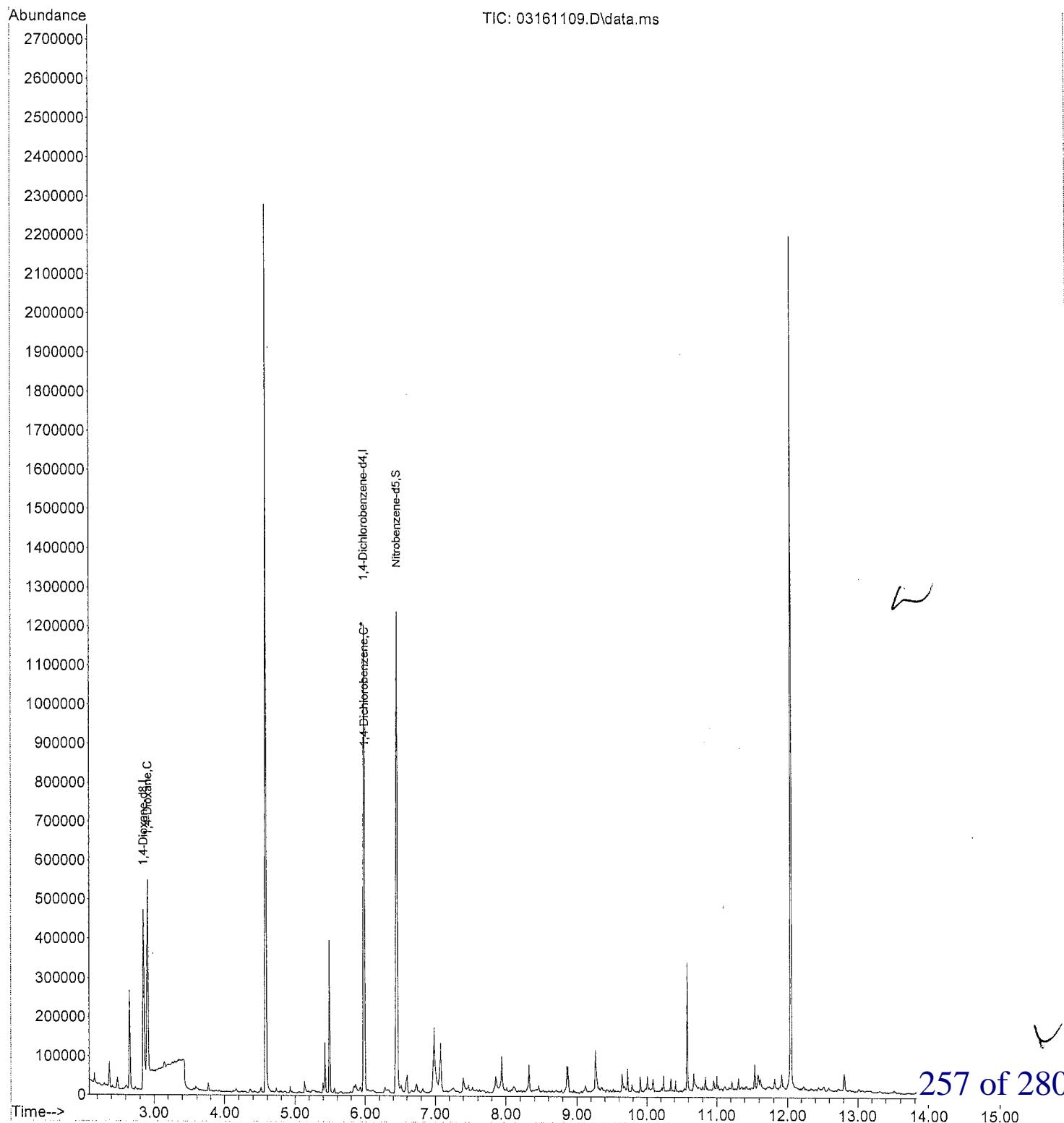
(##) = qualifier out of range (m) = manual integration (+) = signals summed

256 of 280

## Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\Y  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:23:39 2011  
Quant Method : D:\msdcchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\

Data File : 03161109.D

Acq On : 16 Mar 2011 6:58 pm

Operator : CL

Sample : 11C0526-BS1

Misc :

ALS Vial : 9 Sample Multiplier: 1

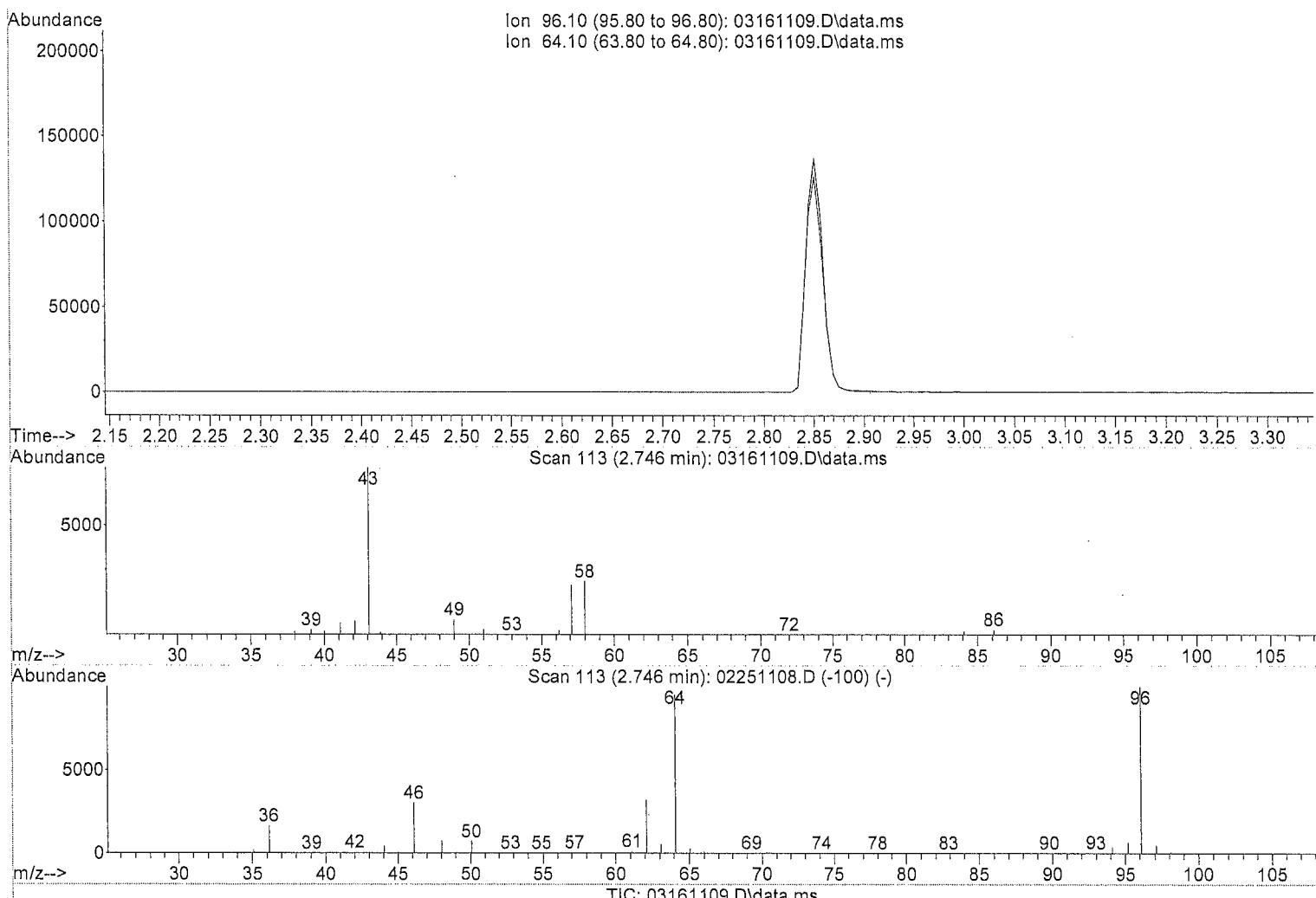
Quant Time: Mar 17 10:06:15 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.746min (-2.746) 0.00ug/mL

response 0

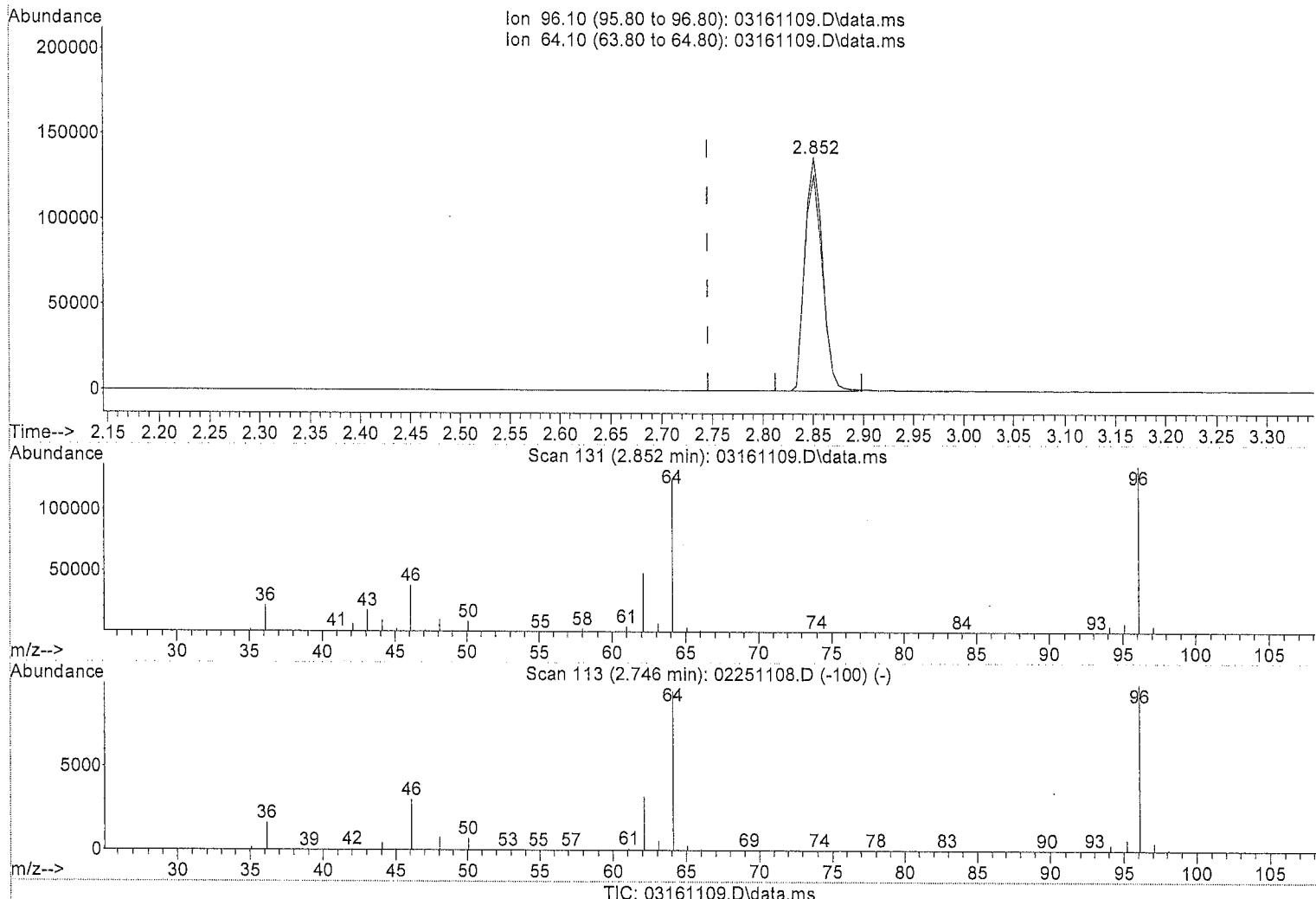
Ion	Exp%	Act%
96.10	100	0.00
64.10	93.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

258 of 280

Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (l)

2.852min (+0.106) 20.00ug/mL m

response 162348

Ion	Exp%	Act%
96.10	100	100
64.10	93.60	92.65
0.00	0.00	0.00
0.00	0.00	0.00

A  
~3.18 min  
259 of 280

Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\

Data File : 03161109.D

Acq On : 16 Mar 2011 6:58 pm

Operator : CL

Sample : 11C0526-BS1

Misc :

ALS Vial : 9 Sample Multiplier: 1

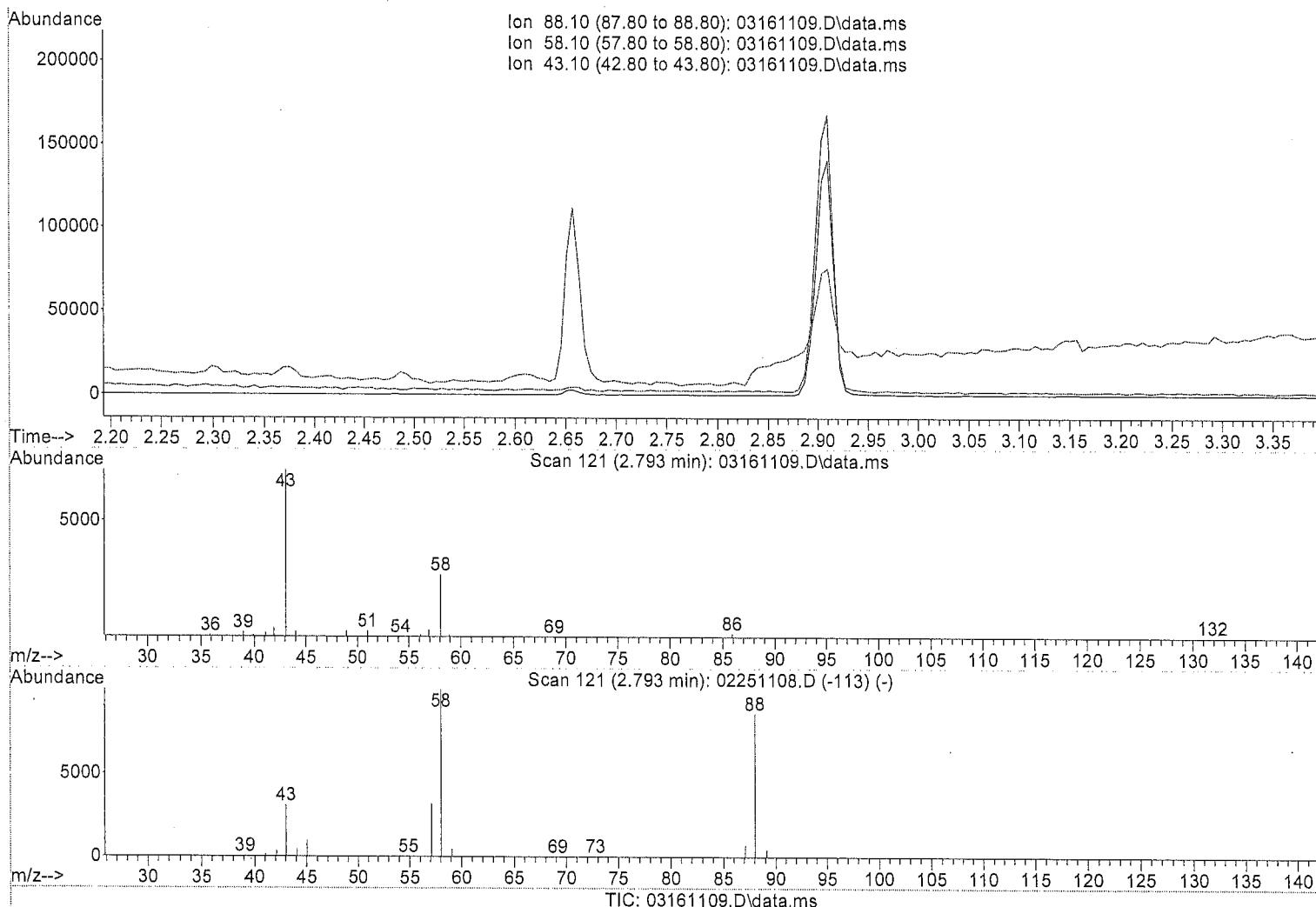
Quant Time: Mar 17 10:06:15 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.793min (-2.793) 0.00ug/mL

response 0

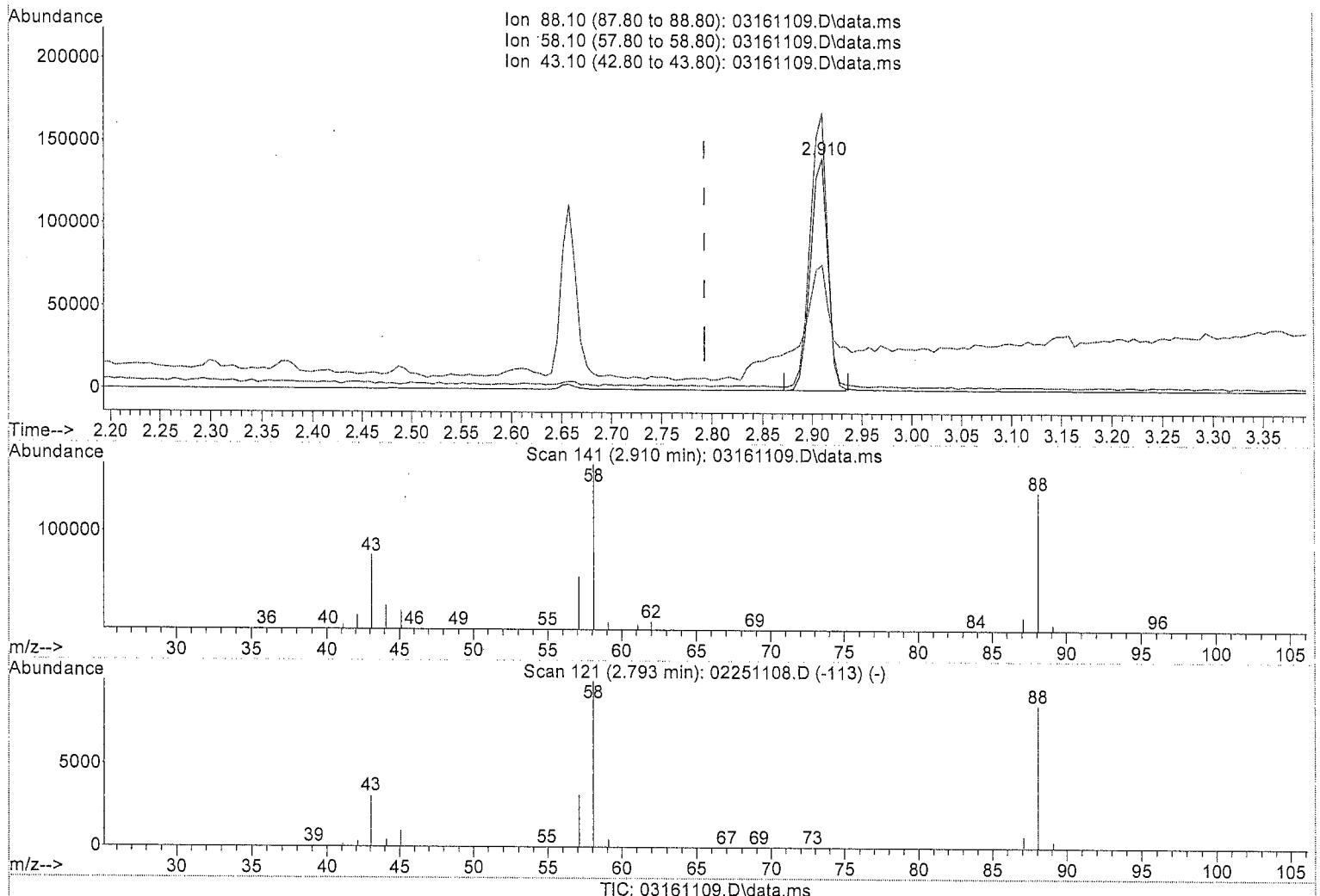
Ion	Exp%	Act%
88.10	100	0.00
58.10	112.80	0.00#
43.10	35.80	0.00#
0.00	0.00	0.00

260 of 280

Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 17 10:06:15 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.910min (+0.118) 20.88ug/mL m

response 172534

Ion	Exp%	Act%
88.10	100	100
58.10	112.80	119.81
43.10	35.80	41.38
0.00	0.00	0.00

261 of 280

Sample Name 11C0526-BS1  
 Data File Name 03161109.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 18:58  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	218822	205085	102542.5	410170	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

3/21/11

262 of 280

3/17/2011 10:15 AM

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:07:07 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	218822	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane-d8	2.85	96	162343m	✓12.89	ug/mL	

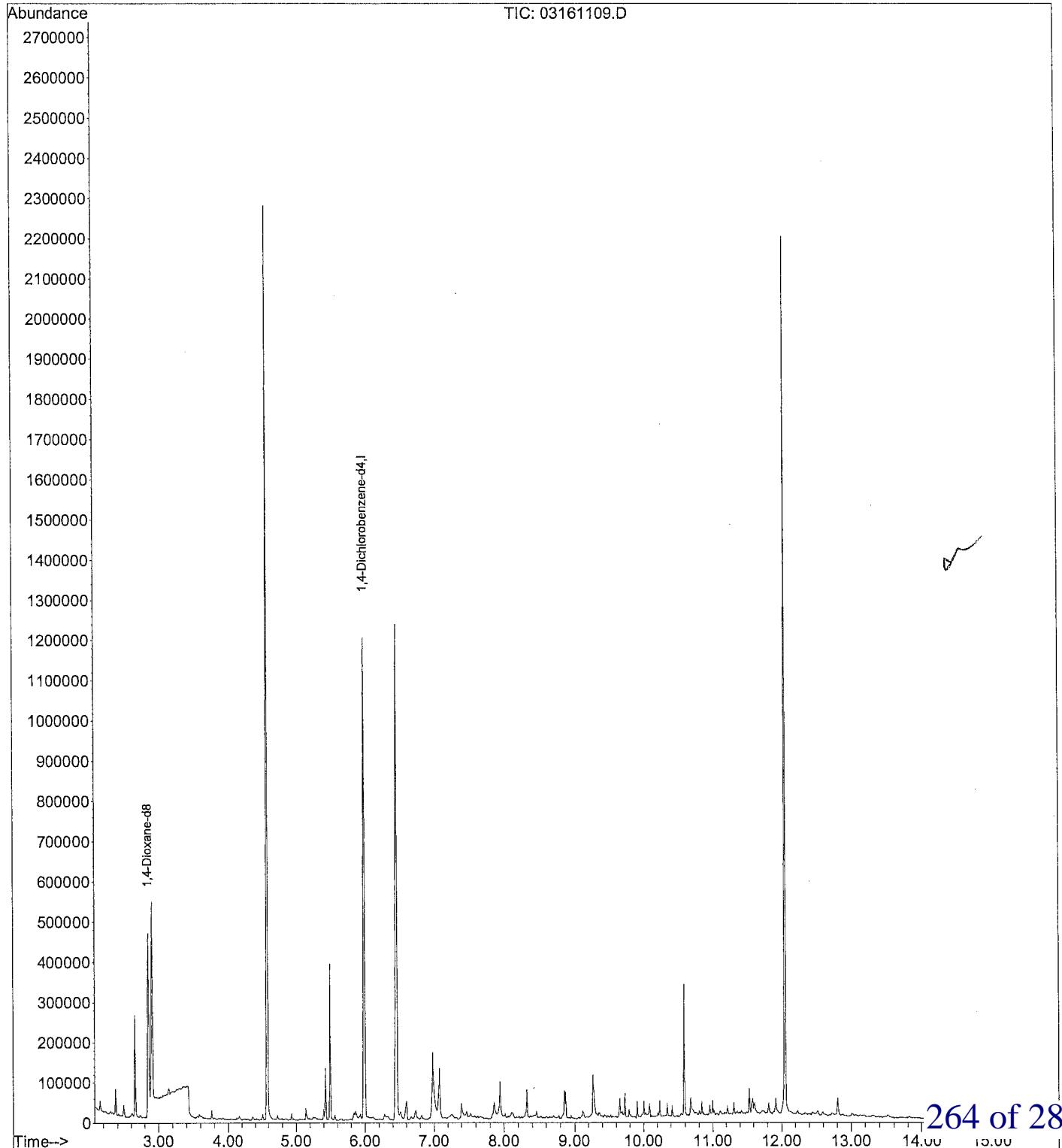
(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11  
263 of 280

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161109.D  
Acq On : 16 Mar 2011 6:58 pm  
Operator : CL  
Sample : 11C0526-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

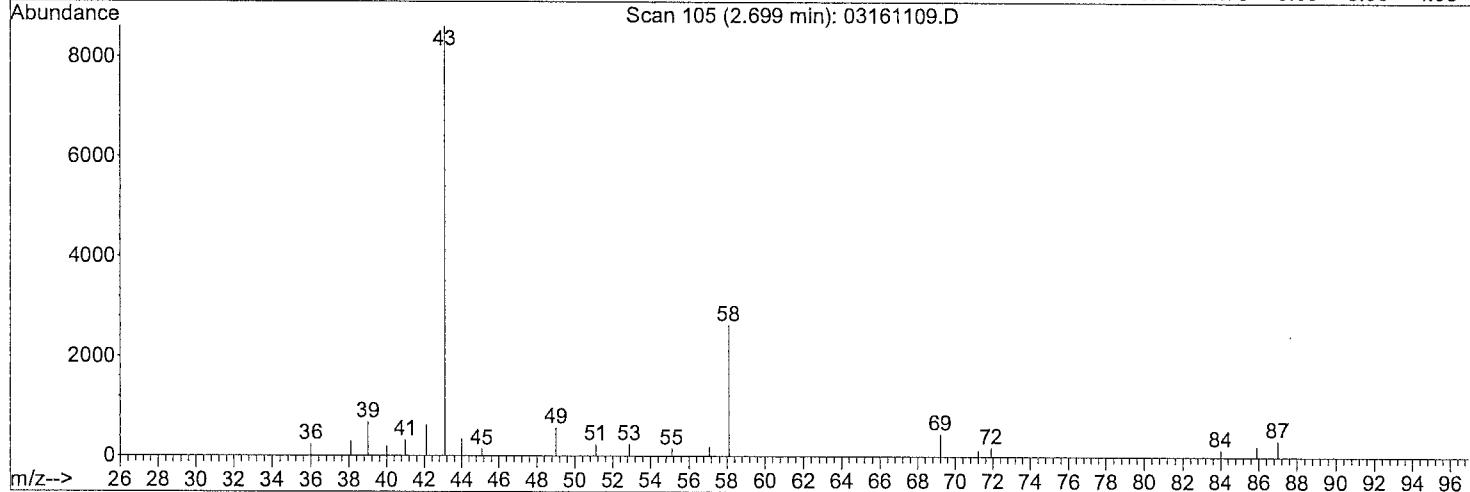
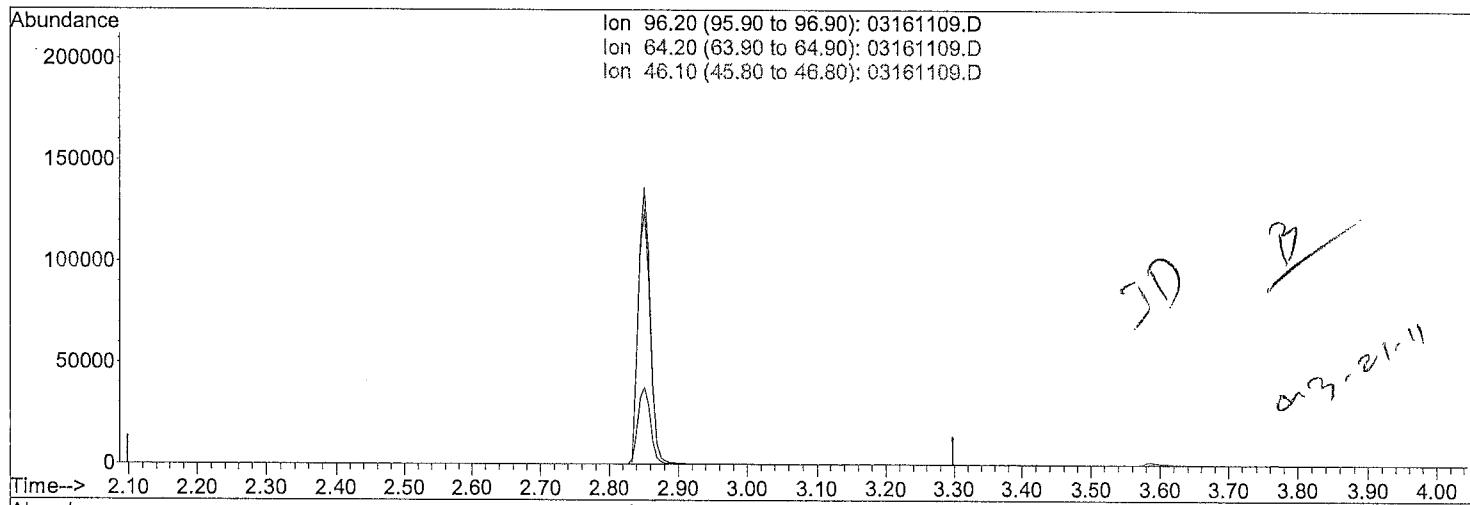
Quant Time: Mar 21 13:07:07 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:01:43 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161109.D

(2) 1,4-Dioxane-d8

2.698min (-2.698) 0.00ug/mL

response 0

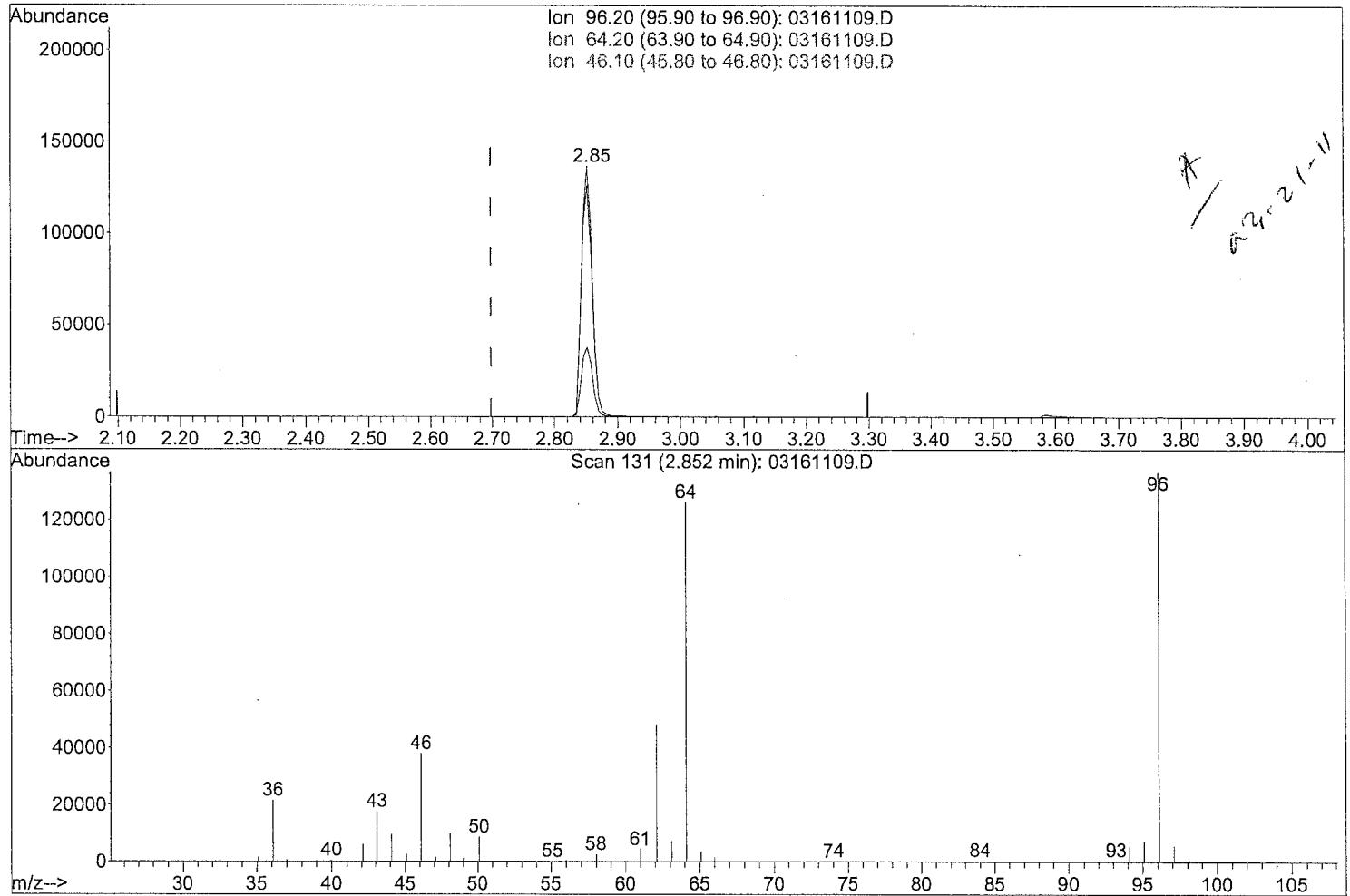
Ion	Exp%	Act%
96.20	100	0.00
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

265 of 280

Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161109.D  
 Acq On : 16 Mar 2011 6:58 pm  
 Operator : CL  
 Sample : 11C0526-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 13:01:43 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161109.D

(2) 1,4-Dioxane-d8

2.852min (+0.153) 12.89ug/mL m

response 162343

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	92.87
46.10	29.30	28.99
0.00	0.00	0.00

3/21/11

266 of 280

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161110.D  
 Acq On : 16 Mar 2011 7:24 pm  
 Operator : CL  
 Sample : 11C0526-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 17 10:06:20 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.828	96	185840	20.00	ug/mL	0.08
3) 1, 4-Dichlorobenzene-d4	5.993	152	227729	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.463	82	676248	16.57	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2.881	88	196800	20.81	ug/mL	96
4) 1, 4-Dichlorobenzene	5.998	146	583	0.02	ug/mL#	1

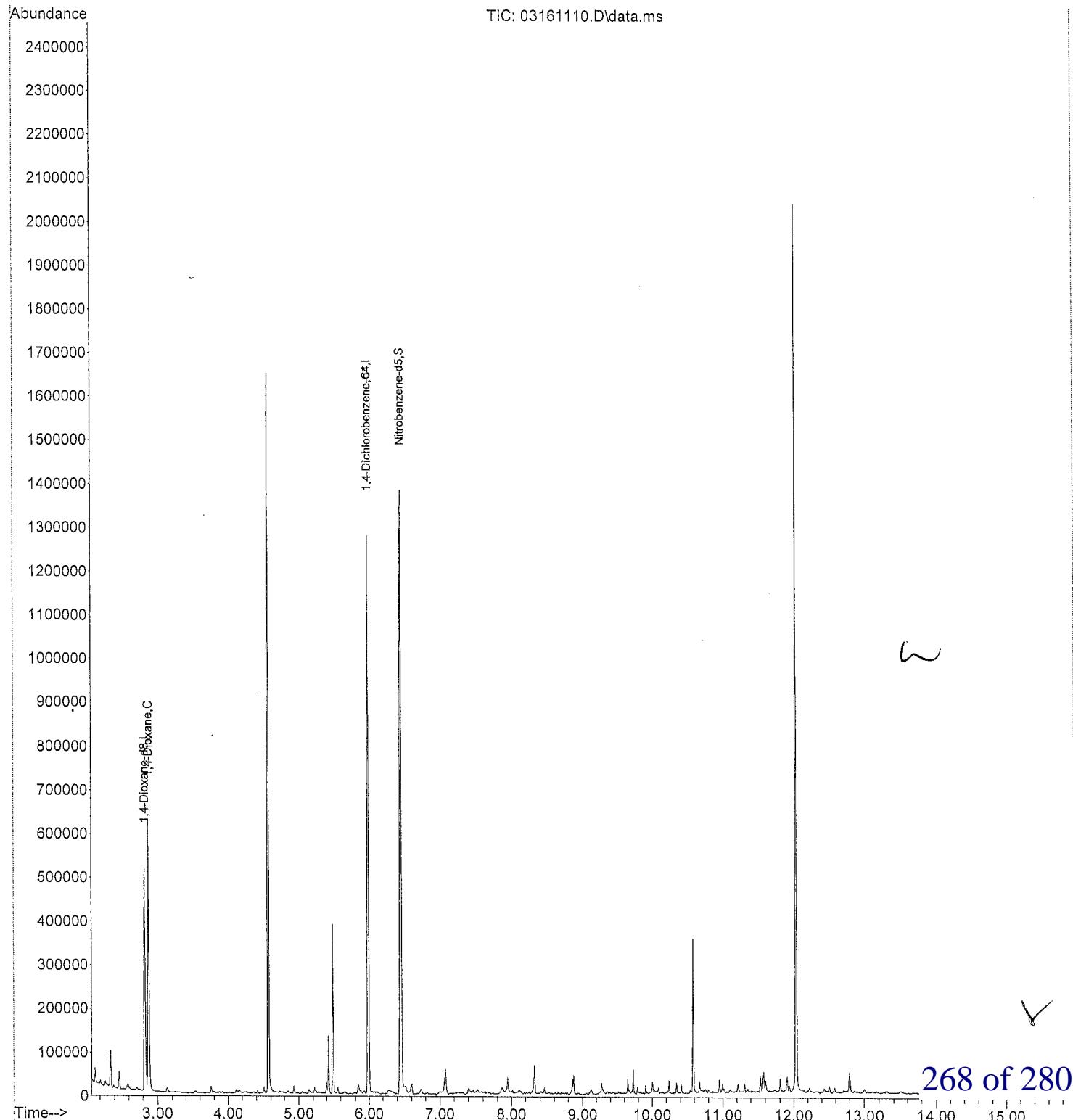
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓  
3/21/11

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
Data File : 03161110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 17 10:06:20 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0526-BSD1  
 Data File Name 03161110.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/16/2011 19:24  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	227729 ✓	205085	102542.5	410170 <-PASS	✓
Internal Standard	RT ✓	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49 <-PASS	✓

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 0316110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 13:08:17 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

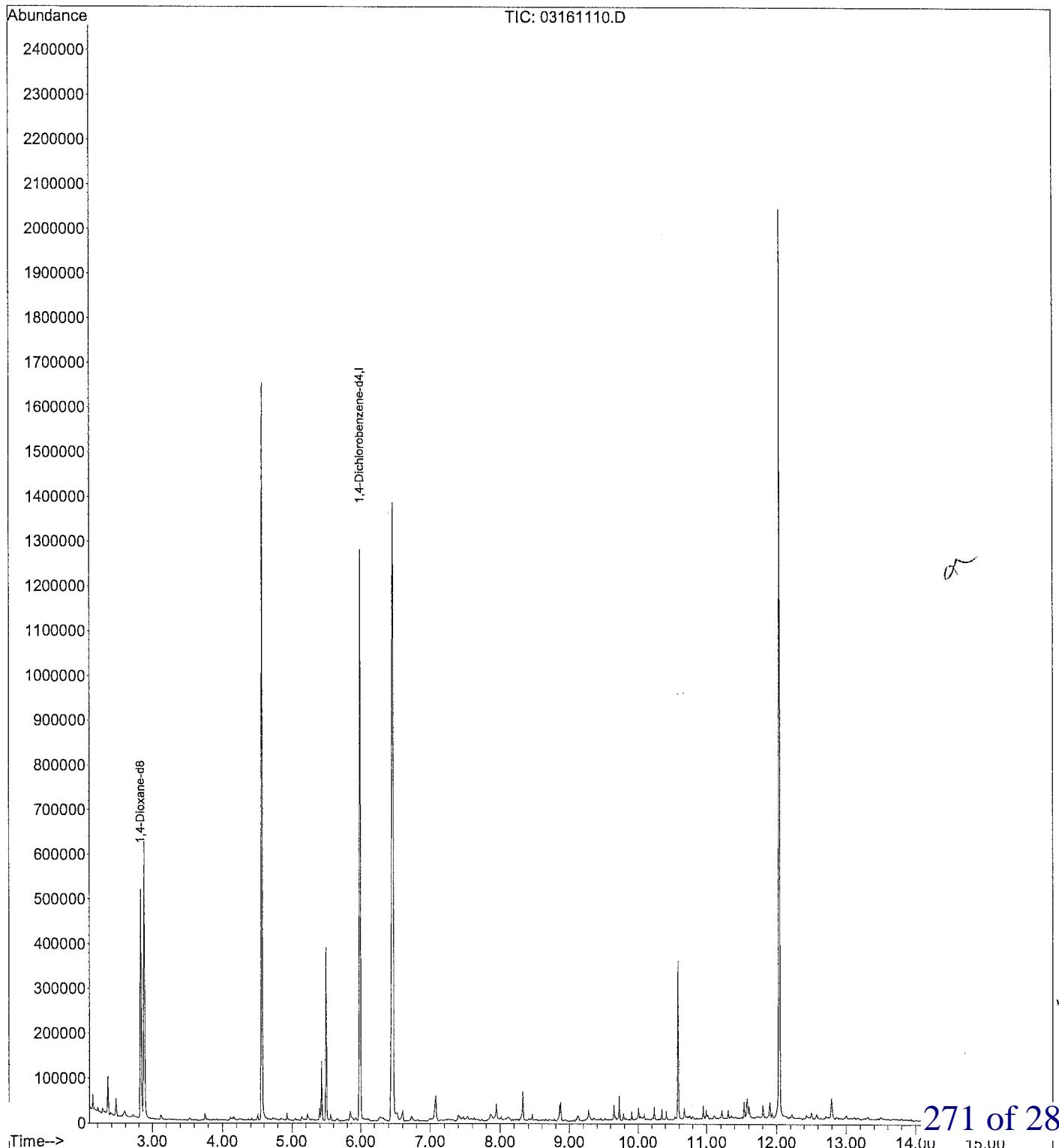
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	227729	10.00	ug/mL	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane-d8	2.83	96	185598m	14.16	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161110.D  
Acq On : 16 Mar 2011 7:24 pm  
Operator : CL  
Sample : 11C0526-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

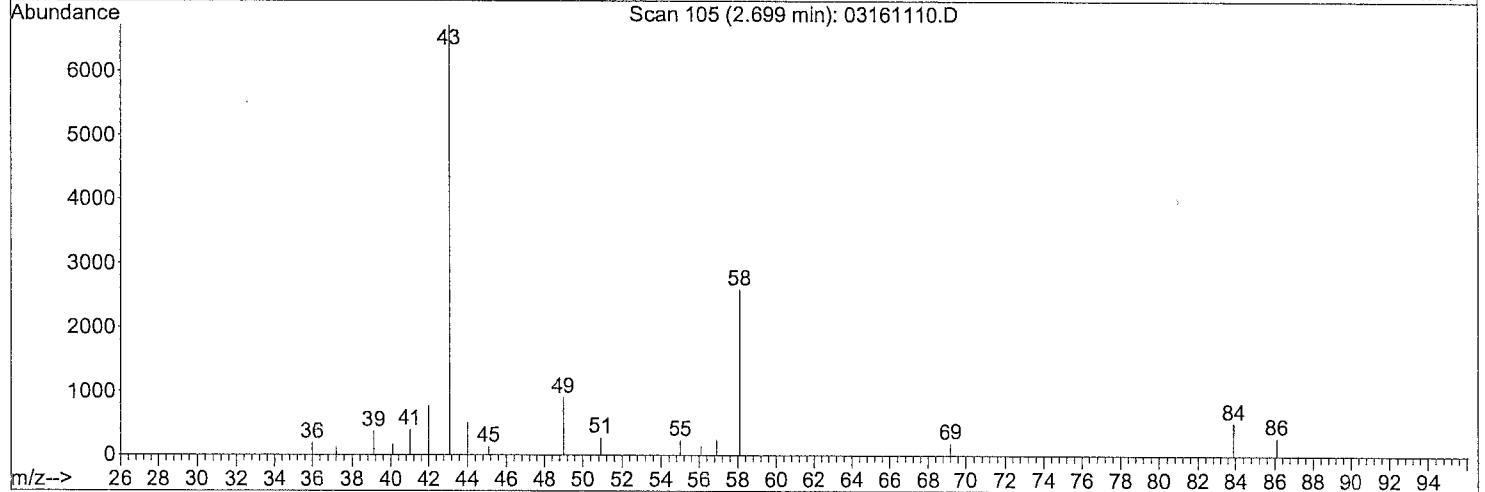
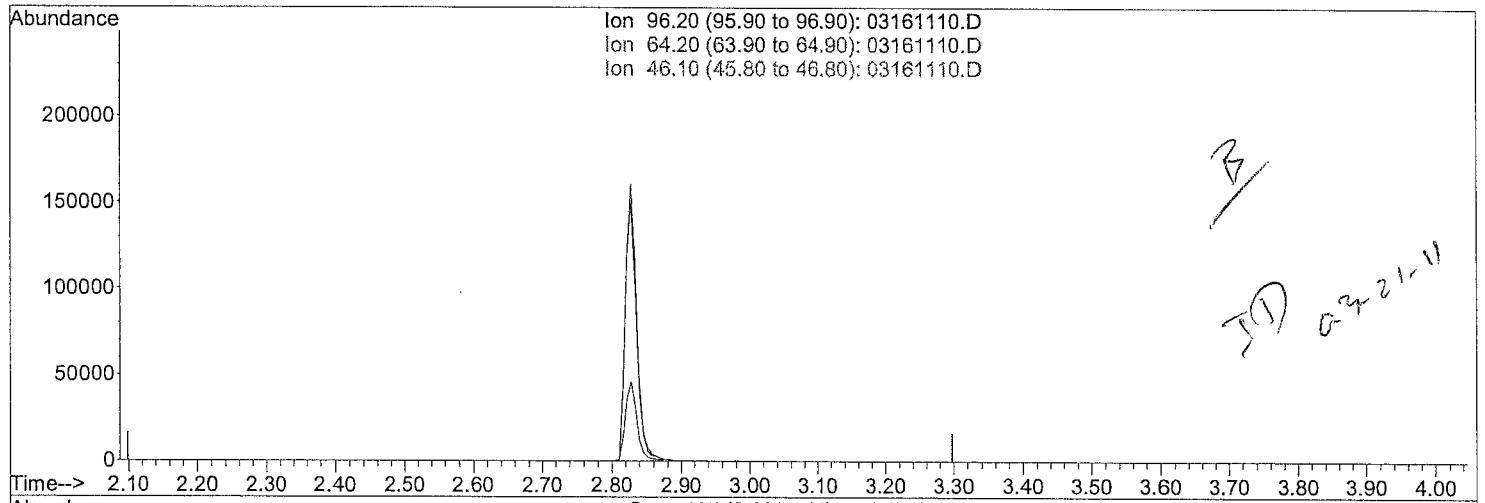
Quant Time: Mar 21 13:08:17 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



## Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161110.D  
 Acq On : 16 Mar 2011 7:24 pm  
 Operator : CL  
 Sample : 11C0526-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 13:01:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161110.D

(2) 1,4-Dioxane-d8

2.698min (-2.698) 0.00ug/mL

response 0

Ion	Exp%	Act%
96.20	100	0.00
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

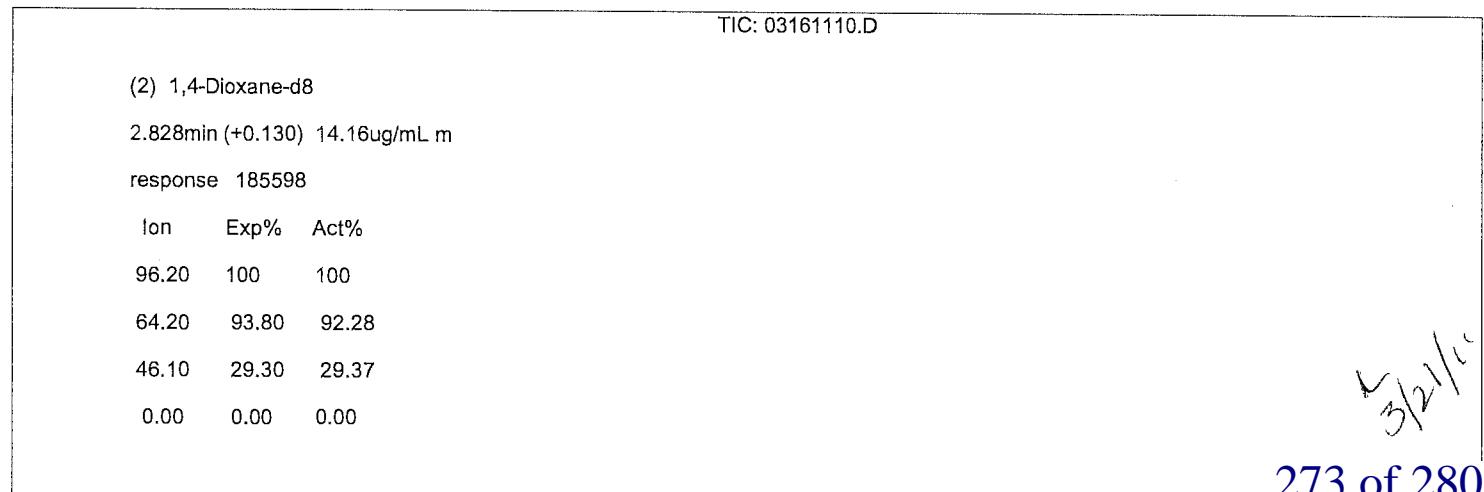
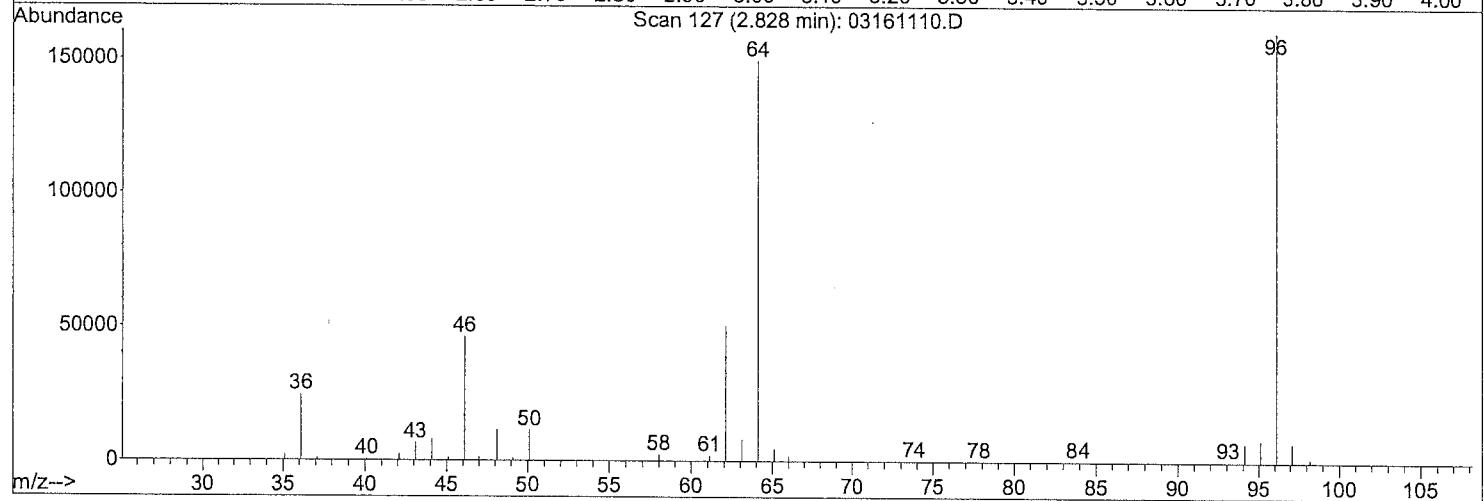
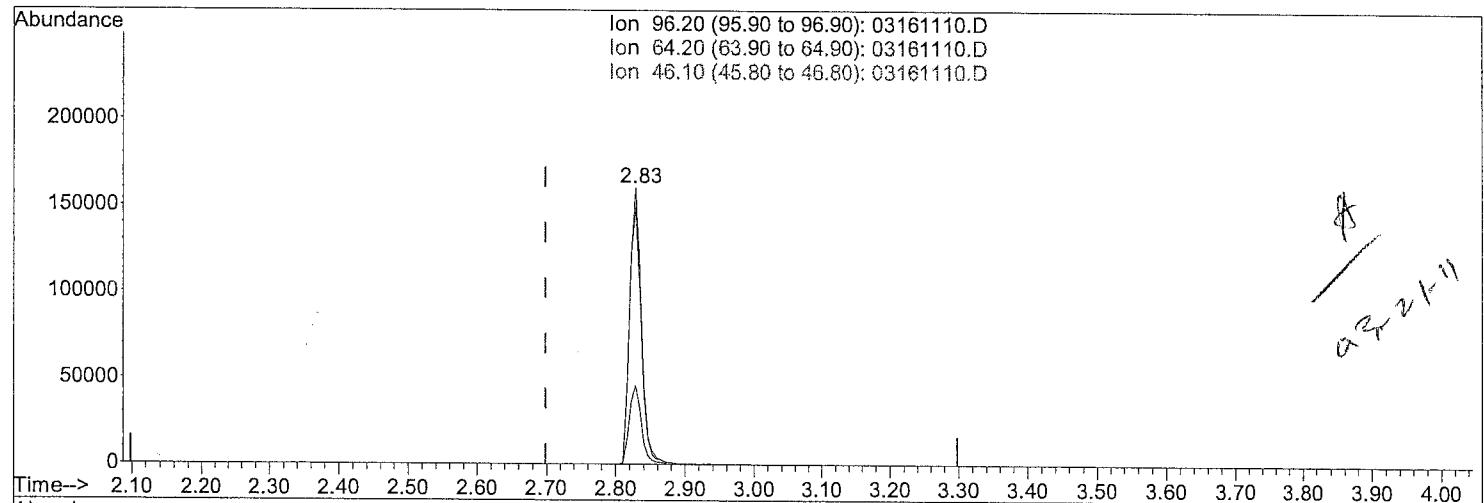
*3/2/11*

272 of 280

Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161110.D  
 Acq On : 16 Mar 2011 7:24 pm  
 Operator : CL  
 Sample : 11C0526-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 13:01:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



273 of 280

Quantitation Report *(Not Reviewed)*

Data Path : D:\msdchem\1\GCMS14\DATA\031611\  
 Data File : 03161121.D  
 Acq On : 17 Mar 2011 12:15 am ✓  
 Operator : CL  
 Sample : PUC0829-01  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

*63, v1, 4*

Quant Time: Mar 17 10:07:10 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 822	96	181657	20.00	ug/mL	0.08
3) 1, 4-Dichlorobenzene-d4	5. 993	152	223134	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	630079	15.76	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 881	88	1317	0.14	ug/mL#	1
4) 1, 4-Dichlorobenzene	6. 004	146	529	0.01	ug/mL#	1

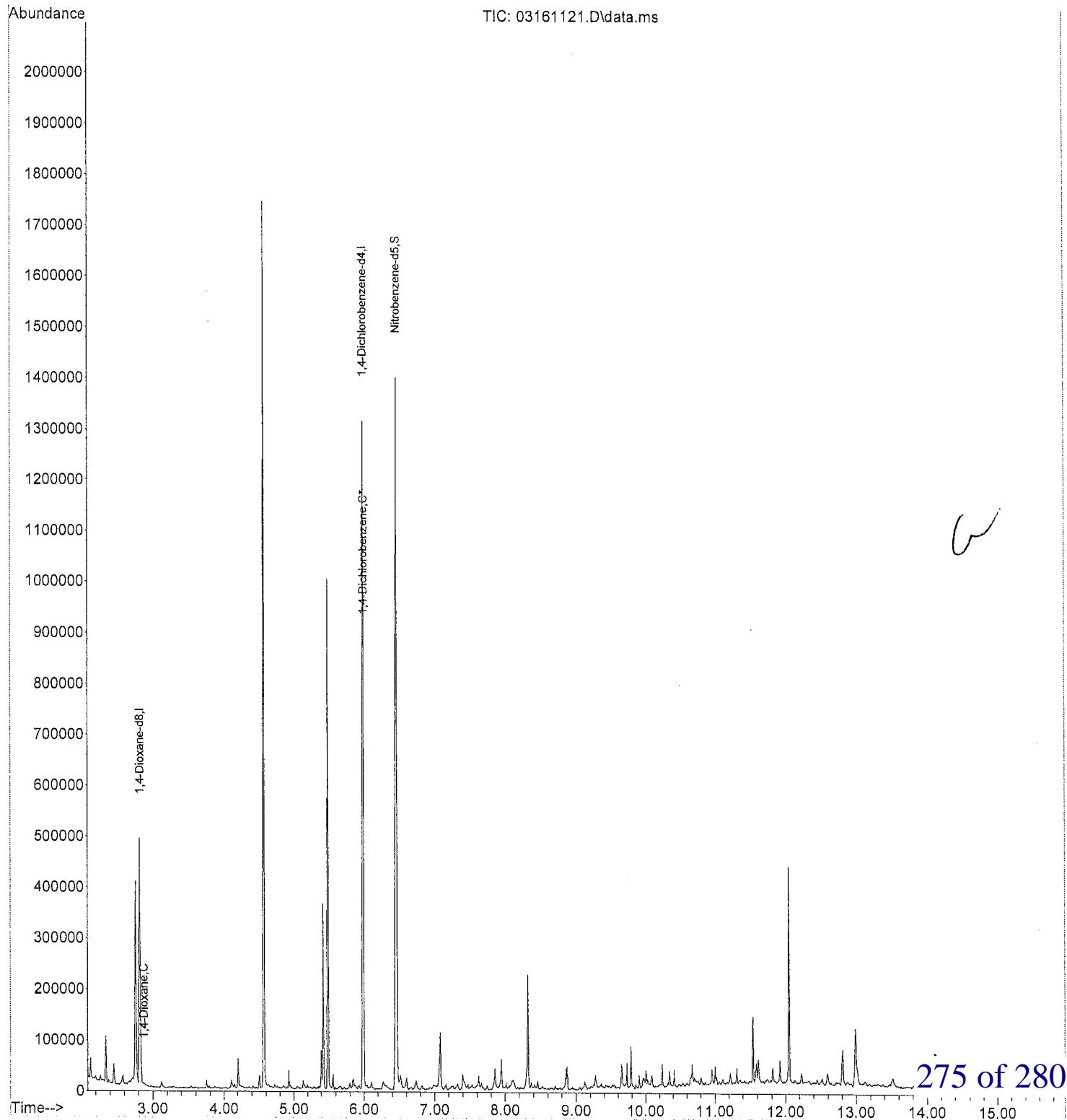
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*5/2/11*

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031611\Y  
Data File : 03161121.D  
Acq On : 17 Mar 2011 12:15 am  
Operator : CL  
Sample : PUC0829-01  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 17 10:07:10 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name PUC0829-01  
 Data File Name 03161121.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031611\  
 Operator CL  
 Date Acquired 3/17/2011 12:15  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03161106.D  
 D:\msdchem\1\GCMS14\DATA\031611\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	223134	/	205085	102542.5	410170 <-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	/	5.99	5.49	6.49 <-PASS

*✓**K. Smith*

Data Path : N:\DATA\031611\  
Data File : 03161121.D  
Acq On : 17 Mar 2011 12:15 am  
Operator : CL  
Sample : PUC0829-01  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 21 13:16:21 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	223134	10.00	ug/mL	0.00
Target Compounds						
2) 1,4-Dioxane-d8	2.82	96	180528m	14.05	ug/mL	Qvalue

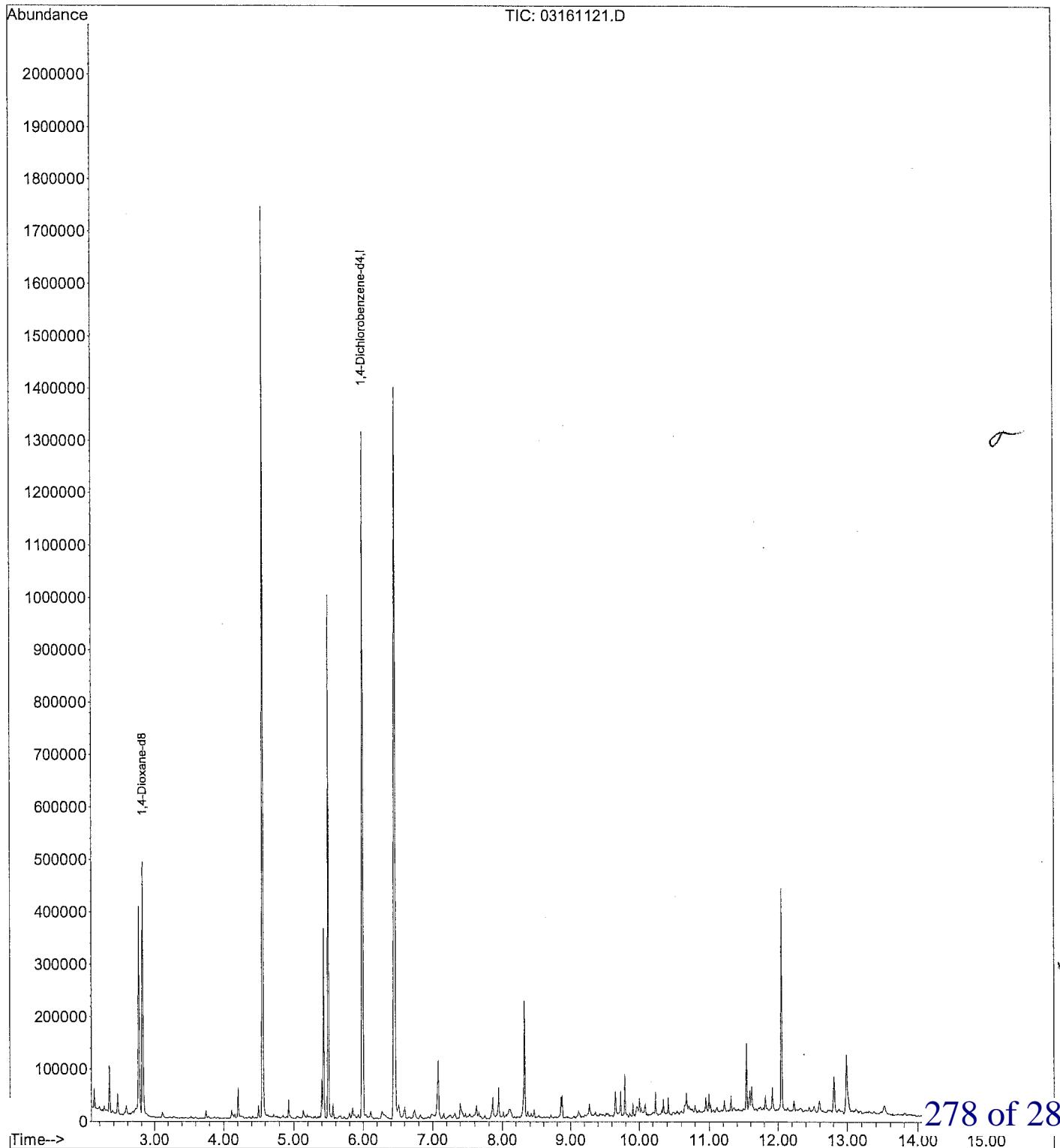
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓/2/11

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031611\  
Data File : 03161121.D  
Acq On : 17 Mar 2011 12:15 am  
Operator : CL  
Sample : PUC0829-01  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

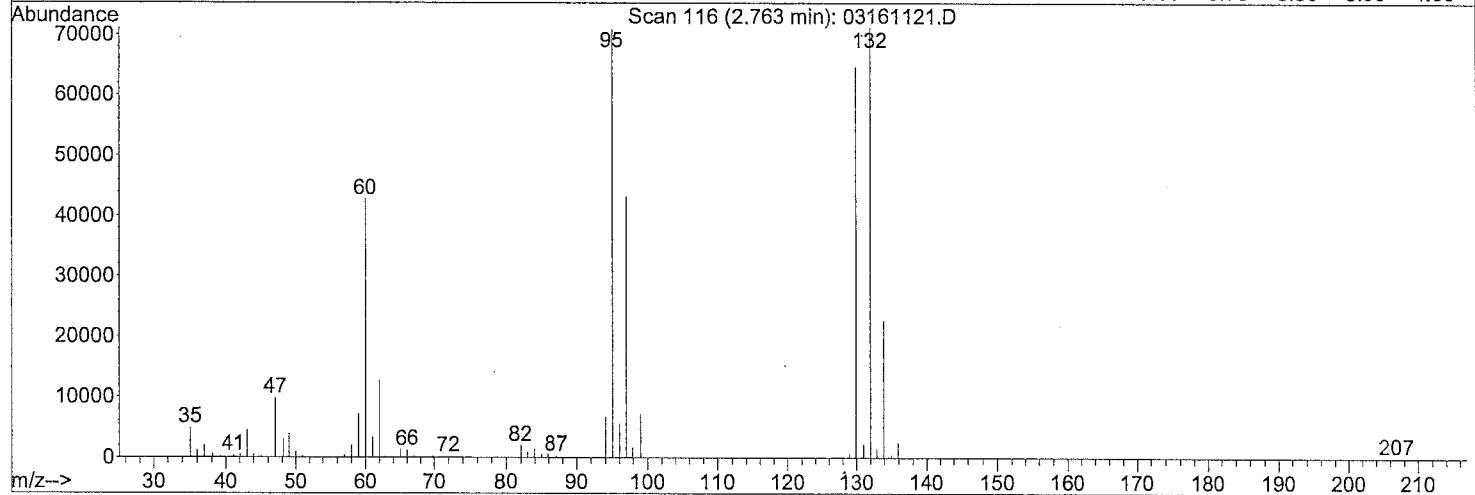
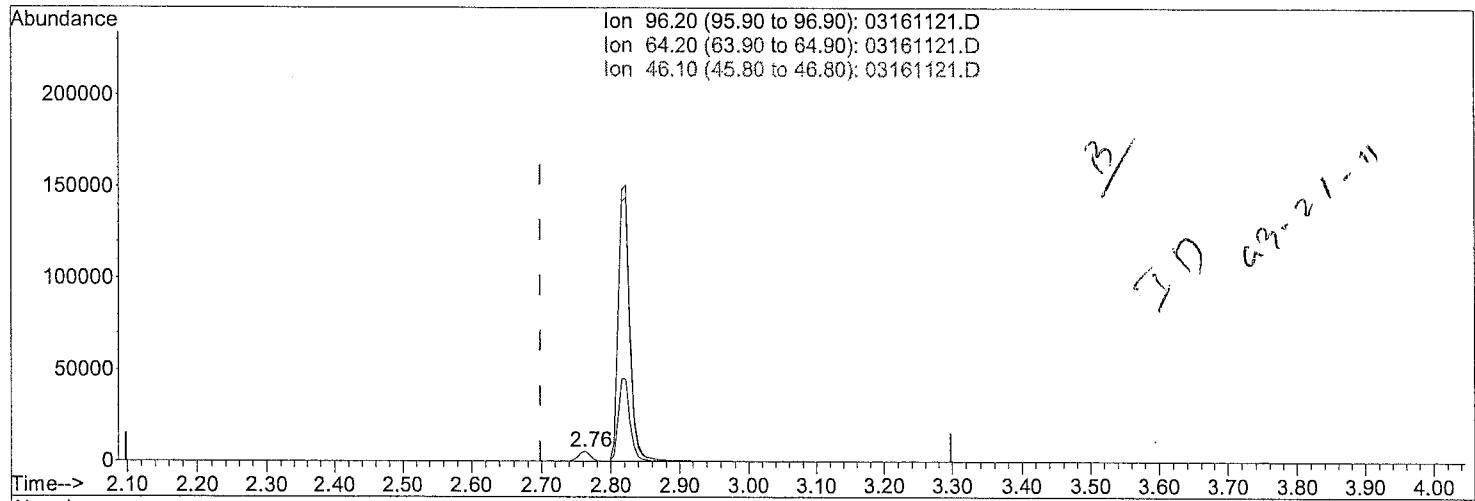
Quant Time: Mar 21 13:16:21 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 12:58:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161121.D  
 Acq On : 17 Mar 2011 12:15 am  
 Operator : CL  
 Sample : PUC0829-01  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 21 13:02:34 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161121.D

(2) 1,4-Dioxane-d8

2.763min (+0.065) 0.52ug/mL

response 6646

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	0.00#
46.10	29.30	0.00#
0.00	0.00	0.00

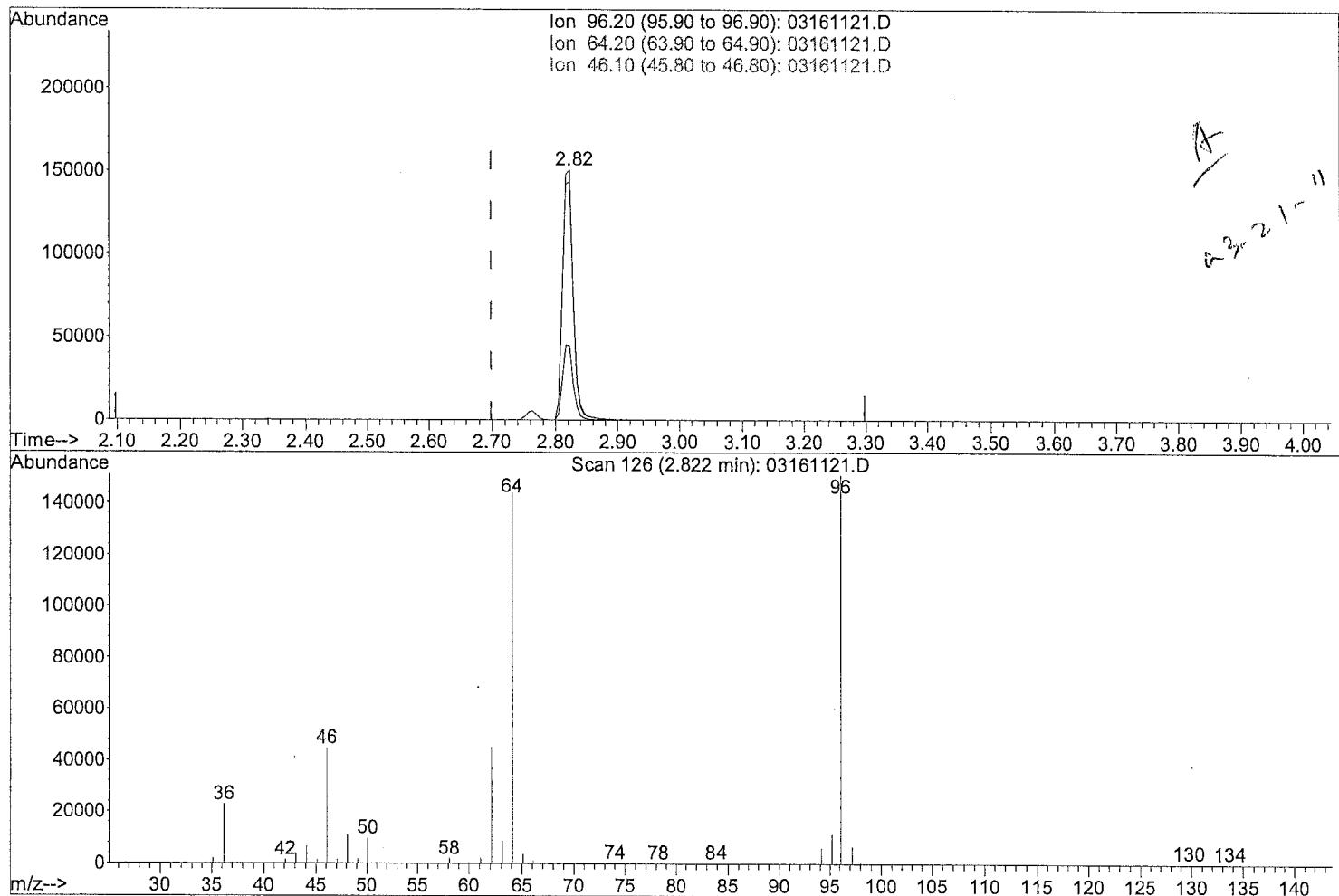
3/21/11

279 of 280

Quantitation Report (Qedit)

Data Path : N:\DATA\031611\  
 Data File : 03161121.D  
 Acq On : 17 Mar 2011 12:15 am  
 Operator : CL  
 Sample : PUC0829-01  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 21 13:02:34 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031611\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 12:58:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031611\03161106.D



TIC: 03161121.D

(2) 1,4-Dioxane-d8

2.822min (+0.124) 14.05ug/mL m

response 180528

Ion	Exp%	Act%
96.20	100	100
64.20	93.80	93.71
46.10	29.30	29.52
0.00	0.00	0.00

280 of 280



### **Level III Data Package**

Environmental Resources Management Inc.

### **TestAmerica Work Order Number:**

PUC1004

### **Prepared for:**

Jason Hilker  
Environmental Resources Management, Inc.  
7272 East Indian School Road, Suite 100  
Scottsdale, AZ 85251



## QA/QC DATA PACKAGE: LEVEL III

### TABLE SUMMARY

	Page Number
CASE NARRATIVE.....	3
CHAIN OF CUSTODY.....	4-5
ANALYTICAL REPORTS.....	6-9
QUALITY CONTROL SUMMARIES.....	10-24
METHOD 8260	
CALIBRATION DATA.....	25-131
ANALYTICAL DATA.....	132-179
METHOD MODIFIED 8270C (1,4-DIOXANE)	
DIGESTION and/or EXTRACTION.....	180-182
CALIBRATION DATA.....	183-224
ANALYTICAL DATA.....	225-285

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

## LABORATORY REPORT

Prepared For: Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251

Attention: Jason Hilker

Project: 0096498.009

Sampled: 03/15/11

Received: 03/15/11

Issued: 03/23/11 15:14

NELAP #01109CA Arizona DHS#AZ0728

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.*

*This entire report was reviewed and approved for release.*

## CASE NARRATIVE

### LABORATORY ID

PUC1004-01

### CLIENT ID

EW-19S-S-031511

### MATRIX

Water

SAMPLE RECEIPT: Samples were received intact, at 1°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.  
N1 - Due to matrix interference the Internal Standard 1,4-Dichlorobenzene-d4 failed lower than method criteria. The surrogates Nitrobenzene-d5 and 1,4-Dioxane-d8 are calculated using this IS. The surrogate recoveries are estimated values due to the IS failure, causing the surrogates to recover higher than laboratory limits.

L3-Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.

R1-The RPD exceeded the acceptance limit.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Kylie Emily  
Project Manager

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

**CHAIN OF CUSTODY FORMS**

TestAmerica

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3840 FAX (602) 454-9303  
[ ] Tucson - 1870 W. Prince Road, Suite 58, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803

**THE LEADER IN ENVIRONMENTAL TESTING**

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**Note:** By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

**ANALYTICAL REPORTS**



THE LEADER IN ENVIRONMENTAL TESTING

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454-9303

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1004-01 (EW-19S-S-031511 - Water)</b>								
<b>Reporting Units: ug/l</b>								
Acetone	EPA 8260B	11C0791	10	ND	1	3/22/2011	3/22/2011	V1
Benzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromochloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromodichloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromoform	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Bromomethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
2-Butanone (MEK)	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
n-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
sec-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
tert-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Carbon disulfide	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Carbon tetrachloride	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Chlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Chloroethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
<b>Chloroform</b>	EPA 8260B	11C0791	0.50	<b>0.69</b>	1	3/22/2011	3/22/2011	
Chloromethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
2-Chlorotoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
4-Chlorotoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dibromochloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dibromo-3-chloropropane	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
1,2-Dibromoethane (EDB)	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dibromomethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,4-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dichlorodifluoromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>1,1-Dichloroethane</b>	EPA 8260B	11C0791	0.50	<b>1.8</b>	1	3/22/2011	3/22/2011	
1,2-Dichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>1,1-Dichloroethene</b>	EPA 8260B	11C0791	0.50	<b>3.1</b>	1	3/22/2011	3/22/2011	
cis-1,2-Dichloroethene	EPA 8260B	11C0791	0.50	<b>2.3</b>	1	3/22/2011	3/22/2011	
trans-1,2-Dichloroethene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dichloropropane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3-Dichloropropane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
2,2-Dichloropropane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,1-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
cis-1,3-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
trans-1,3-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Ethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Hexachlorobutadiene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	

**TestAmerica Phoenix**Kylie Emily  
Project ManagerThe results pertain only to the samples tested in the laboratory. This report shall not be reproduced,  
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PUC1004 &lt;Page 7 of 285&gt;



THE LEADER IN ENVIRONMENTAL TESTING

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1004-01 (EW-19S-S-031511 - Water) - cont.</b>								
<b>Reporting Units: ug/l</b>								
2-Hexanone	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
Iodomethane	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	L3
Isopropylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
p-Isopropyltoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Methylene Chloride	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
<b>Methyl-tert-butyl Ether (MTBE)</b>	EPA 8260B	11C0791	0.50	<b>2.2</b>	1	3/22/2011	3/22/2011	
Naphthalene	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
n-Propylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Styrene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,1,2-Tetrachloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,2,2-Tetrachloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Tetrachloroethene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Toluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2,3-Trichlorobenzene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,2,4-Trichlorobenzene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,1,1-Trichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,2-Trichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>Trichloroethene</b>	EPA 8260B	11C0791	0.50	<b>7.8</b>	1	3/22/2011	3/22/2011	
Trichlorofluoromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2,3-Trichloropropane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,2,4-Trimethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3,5-Trimethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Vinyl Acetate	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Vinyl chloride	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Xylenes, Total	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Freon 113	EPA 8260B	11C0791	2.0	ND	1	3/22/2011	3/22/2011	
<i>Surrogate: Dibromofluoromethane (70-130%)</i>								
<i>Surrogate: Toluene-d8 (70-130%)</i>								
<i>Surrogate: 4-Bromofluorobenzene (70-130%)</i>								
95 %								
89 %								
87 %								

TestAmerica Phoenix

Kylie Emily  
Project Manager

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PUC1004 <Pa<sub>4</sub> 8 of 285



THE LEADER IN ENVIRONMENTAL TESTING

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

### 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1004-01 (EW-19S-S-031511 - Water)</b>								
1,4-Dioxane	SW8270C	11C0614	1.0	1.4	1	3/16/2011	3/18/2011	
				73 %				
				83 %				

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Kylie Emily  
Project Manager

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PUC1004 <Page 9 of 285

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QA/QC DATA PACKAGE: LEVEL III

## QUALITY CONTROL SUMMARIES

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
Blank Analyzed: 03/22/2011 (11C0791-BLK1)										
Acetone	ND	10	ug/l							VI
Benzene	ND	0.50	ug/l							
Bromobenzene	ND	0.50	ug/l							
Bromochloromethane	ND	0.50	ug/l							
Bromodichloromethane	ND	0.50	ug/l							
Bromoform	ND	1.0	ug/l							
Bromomethane	ND	1.0	ug/l							
2-Butanone (MEK)	ND	2.5	ug/l							
n-Butylbenzene	ND	0.50	ug/l							
sec-Butylbenzene	ND	0.50	ug/l							
tert-Butylbenzene	ND	0.50	ug/l							
Carbon disulfide	ND	0.50	ug/l							
Carbon tetrachloride	ND	0.50	ug/l							
Chlorobenzene	ND	0.50	ug/l							
Chloroethane	ND	1.0	ug/l							
Chloroform	ND	0.50	ug/l							
Chloromethane	ND	1.0	ug/l							
2-Chlorotoluene	ND	0.50	ug/l							
4-Chlorotoluene	ND	0.50	ug/l							
Dibromochloromethane	ND	0.50	ug/l							
1,2-Dibromo-3-chloropropane	ND	2.5	ug/l							
1,2-Dibromoethane (EDB)	ND	0.50	ug/l							
Dibromomethane	ND	0.50	ug/l							
1,2-Dichlorobenzene	ND	0.50	ug/l							
1,3-Dichlorobenzene	ND	0.50	ug/l							
1,4-Dichlorobenzene	ND	0.50	ug/l							
Dichlorodifluoromethane	ND	0.50	ug/l							
1,1-Dichloroethane	ND	0.50	ug/l							
1,2-Dichloroethane	ND	0.50	ug/l							
1,1-Dichloroethene	ND	0.50	ug/l							
cis-1,2-Dichloroethene	ND	0.50	ug/l							
trans-1,2-Dichloroethene	ND	0.50	ug/l							
1,2-Dichloropropane	ND	0.50	ug/l							
1,3-Dichloropropane	ND	0.50	ug/l							
2,2-Dichloropropane	ND	1.0	ug/l							

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009  
Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Blank Analyzed: 03/22/2011 (11C0791-BLK1)</b>										
1,1-Dichloropropene	ND	0.50	ug/l							
cis-1,3-Dichloropropene	ND	0.50	ug/l							
trans-1,3-Dichloropropene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Hexachlorobutadiene	ND	1.0	ug/l							
2-Hexanone	ND	2.5	ug/l							
Iodomethane	ND	2.5	ug/l							
Isopropylbenzene	ND	0.50	ug/l							
p-Isopropyltoluene	ND	0.50	ug/l							
Methylene Chloride	ND	1.0	ug/l							
4-Methyl-2-pentanone (MIBK)	ND	2.5	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	ug/l							
Naphthalene	ND	2.5	ug/l							
n-Propylbenzene	ND	0.50	ug/l							
Styrene	ND	0.50	ug/l							
1,1,1,2-Tetrachloroethane	ND	0.50	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	ug/l							
Tetrachloroethene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
1,2,3-Trichlorobenzene	ND	1.0	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	ug/l							
1,1,1-Trichloroethane	ND	0.50	ug/l							
1,1,2-Trichloroethane	ND	0.50	ug/l							
Trichloroethene	ND	0.50	ug/l							
Trichlorofluoromethane	ND	0.50	ug/l							
1,2,3-Trichloropropane	ND	1.0	ug/l							
1,2,4-Trimethylbenzene	ND	0.50	ug/l							
1,3,5-Trimethylbenzene	ND	0.50	ug/l							
Vinyl Acetate	ND	1.0	ug/l							
Vinyl chloride	ND	0.50	ug/l							
Xylenes, Total	ND	1.0	ug/l							
Freon 113	ND	2.0	ug/l							
<i>Surrogate: Dibromofluoromethane</i>	22.8		ug/l	25.0		91	70-130			
<i>Surrogate: Toluene-d8</i>	22.6		ug/l	25.0		90	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	22.0		ug/l	25.0		88	70-130			

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

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454-9303

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

**METHOD BLANK/QC DATA****VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0791 Extracted: 03/22/11</u></b>										
<b>LCS Analyzed: 03/22/2011 (11C0791-BS1)</b>										
Acetone	30.6	10	ug/l	25.0		122	30-150			VI
Benzene	20.1	0.50	ug/l	25.0		81	70-130			
Bromobenzene	21.1	0.50	ug/l	25.0		85	70-130			
Bromochloromethane	20.9	0.50	ug/l	25.0		84	70-130			
Bromodichloromethane	21.2	0.50	ug/l	25.0		85	70-130			
Bromoform	22.1	1.0	ug/l	25.0		89	67-122			
Bromomethane	20.8	1.0	ug/l	25.0		83	64-132			
2-Butanone (MEK)	25.6	2.5	ug/l	25.0		103	48-150			
n-Butylbenzene	22.0	0.50	ug/l	25.0		88	70-130			
sec-Butylbenzene	21.0	0.50	ug/l	25.0		84	70-130			
tert-Butylbenzene	21.0	0.50	ug/l	25.0		84	70-130			
Carbon disulfide	29.0	0.50	ug/l	25.0		116	61-126			
Carbon tetrachloride	21.4	0.50	ug/l	25.0		86	70-130			
Chlorobenzene	20.7	0.50	ug/l	25.0		83	70-130			
Chloroethane	21.3	1.0	ug/l	25.0		85	69-128			
Chloroform	20.2	0.50	ug/l	25.0		81	70-130			
Chloromethane	17.5	1.0	ug/l	25.0		70	56-131			
2-Chlorotoluene	20.4	0.50	ug/l	25.0		82	70-130			
4-Chlorotoluene	21.3	0.50	ug/l	25.0		85	70-130			
Dibromochloromethane	21.7	0.50	ug/l	25.0		87	70-130			
1,2-Dibromo-3-chloropropane	21.4	2.5	ug/l	25.0		86	63-129			
1,2-Dibromoethane (EDB)	21.3	0.50	ug/l	25.0		85	70-130			
Dibromomethane	21.1	0.50	ug/l	25.0		84	70-130			
1,2-Dichlorobenzene	20.8	0.50	ug/l	25.0		83	70-130			
1,3-Dichlorobenzene	20.9	0.50	ug/l	25.0		84	70-130			
1,4-Dichlorobenzene	20.9	0.50	ug/l	25.0		83	70-130			
Dichlorodifluoromethane	20.6	0.50	ug/l	25.0		82	42-150			
1,1-Dichloroethane	20.6	0.50	ug/l	25.0		82	70-130			
1,2-Dichloroethane	20.8	0.50	ug/l	25.0		83	72-133			
1,1-Dichloroethene	25.7	0.50	ug/l	25.0		103	70-130			
cis-1,2-Dichloroethene	19.9	0.50	ug/l	25.0		79	70-130			
trans-1,2-Dichloroethene	21.1	0.50	ug/l	25.0		84	70-130			
1,2-Dichloropropane	20.7	0.50	ug/l	25.0		83	70-130			
1,3-Dichloropropane	20.9	0.50	ug/l	25.0		84	70-130			
2,2-Dichloropropane	21.0	1.0	ug/l	25.0		84	70-130			

**TestAmerica Phoenix**

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>LCS Analyzed: 03/22/2011 (11C0791-BS1)</b>										
1,1-Dichloropropene	21.0	0.50	ug/l	25.0		84	70-130			
cis-1,3-Dichloropropene	21.4	0.50	ug/l	25.0		86	70-130			
trans-1,3-Dichloropropene	22.4	0.50	ug/l	25.0		89	70-130			
Ethylbenzene	20.7	0.50	ug/l	25.0		83	70-130			
Hexachlorobutadiene	22.0	1.0	ug/l	25.0		88	70-130			
2-Hexanone	24.6	2.5	ug/l	25.0		98	44-150			
Iodomethane	38.3	2.5	ug/l	25.0		153	58-138			L3
Isopropylbenzene	22.9	0.50	ug/l	25.0		92	70-130			
p-Isopropyltoluene	21.9	0.50	ug/l	25.0		88	70-130			
Methylene Chloride	24.7	1.0	ug/l	25.0		99	70-130			
4-Methyl-2-pentanone (MIBK)	23.5	2.5	ug/l	25.0		94	61-142			
Methyl-tert-butyl Ether (MTBE)	20.0	0.50	ug/l	25.0		80	70-130			
Naphthalene	24.0	2.5	ug/l	25.0		96	65-129			
n-Propylbenzene	21.8	0.50	ug/l	25.0		87	70-130			
Styrene	21.6	0.50	ug/l	25.0		86	70-130			
1,1,1,2-Tetrachloroethane	20.8	0.50	ug/l	25.0		83	70-130			
1,1,2,2-Tetrachloroethane	21.4	0.50	ug/l	25.0		86	70-130			
Tetrachloroethene	20.8	0.50	ug/l	25.0		83	70-130			
Toluene	20.2	0.50	ug/l	25.0		81	70-130			
1,2,3-Trichlorobenzene	23.8	1.0	ug/l	25.0		95	70-130			
1,2,4-Trichlorobenzene	23.8	1.0	ug/l	25.0		95	70-130			
1,1,1-Trichloroethane	20.9	0.50	ug/l	25.0		84	70-130			
1,1,2-Trichloroethane	21.2	0.50	ug/l	25.0		85	70-130			
Trichloroethene	20.7	0.50	ug/l	25.0		83	70-130			
Trichlorofluoromethane	23.8	0.50	ug/l	25.0		95	78-149			
1,2,3-Trichloropropane	21.8	1.0	ug/l	25.0		87	70-130			
1,2,4-Trimethylbenzene	21.9	0.50	ug/l	25.0		88	70-130			
1,3,5-Trimethylbenzene	21.4	0.50	ug/l	25.0		86	70-130			
Vinyl Acetate	26.4	1.0	ug/l	25.0		105	57-149			
Vinyl chloride	21.0	0.50	ug/l	25.0		84	66-134			
Xylenes, Total	41.1	1.0	ug/l	50.0		82	70-130			
Freon 113	24.5	2.0	ug/l	25.0		98	63-136			
Surrogate: Dibromoiodomethane	23.2		ug/l	25.0		93	70-130			
Surrogate: Toluene-d8	22.6		ug/l	25.0		90	70-130			
Surrogate: 4-Bromofluorobenzene	22.2		ug/l	25.0		89	70-130			

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11  
 Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>LCS Dup Analyzed: 03/22/2011 (11C0791-BSD1)</b>										
Acetone	28.4	10	ug/l	25.0	113	30-150	7	35		VI
Benzene	20.0	0.50	ug/l	25.0	80	70-130	0.7	20		
Bromobenzene	22.0	0.50	ug/l	25.0	88	70-130	4	20		
Bromochloromethane	20.8	0.50	ug/l	25.0	83	70-130	0.5	20		
Bromodichloromethane	21.0	0.50	ug/l	25.0	84	70-130	0.9	20		
Bromoform	23.0	1.0	ug/l	25.0	92	67-122	4	20		
Bromomethane	18.3	1.0	ug/l	25.0	73	64-132	13	20		
2-Butanone (MEK)	23.3	2.5	ug/l	25.0	93	48-150	9	33		
n-Butylbenzene	22.0	0.50	ug/l	25.0	88	70-130	0.3	20		
sec-Butylbenzene	21.0	0.50	ug/l	25.0	84	70-130	0.1	20		
tert-Butylbenzene	21.3	0.50	ug/l	25.0	85	70-130	1	20		
Carbon disulfide	23.5	0.50	ug/l	25.0	94	61-126	21	20		R6
Carbon tetrachloride	21.2	0.50	ug/l	25.0	85	70-130	1	20		
Chlorobenzene	20.0	0.50	ug/l	25.0	80	70-130	3	20		
Chloroethane	19.9	1.0	ug/l	25.0	79	69-128	7	20		
Chloroform	19.6	0.50	ug/l	25.0	78	70-130	3	20		
Chloromethane	16.5	1.0	ug/l	25.0	66	56-131	6	20		
2-Chlorotoluene	20.6	0.50	ug/l	25.0	82	70-130	0.8	20		
4-Chlorotoluene	21.4	0.50	ug/l	25.0	86	70-130	0.5	20		
Dibromochloromethane	20.8	0.50	ug/l	25.0	83	70-130	4	20		
1,2-Dibromo-3-chloropropane	22.4	2.5	ug/l	25.0	90	63-129	4	25		
1,2-Dibromoethane (EDB)	20.8	0.50	ug/l	25.0	83	70-130	2	20		
Dibromomethane	21.7	0.50	ug/l	25.0	87	70-130	3	20		
1,2-Dichlorobenzene	21.2	0.50	ug/l	25.0	85	70-130	2	20		
1,3-Dichlorobenzene	21.2	0.50	ug/l	25.0	85	70-130	1	20		
1,4-Dichlorobenzene	21.4	0.50	ug/l	25.0	85	70-130	2	20		
Dichlorodifluoromethane	19.2	0.50	ug/l	25.0	77	42-150	7	20		
1,1-Dichloroethane	20.0	0.50	ug/l	25.0	80	70-130	3	20		
1,2-Dichloroethane	20.2	0.50	ug/l	25.0	81	72-133	3	20		
1,1-Dichloroethene	20.0	0.50	ug/l	25.0	80	70-130	25	20		R6
cis-1,2-Dichloroethene	19.5	0.50	ug/l	25.0	78	70-130	2	20		
trans-1,2-Dichloroethene	20.3	0.50	ug/l	25.0	81	70-130	4	20		
1,2-Dichloropropane	21.0	0.50	ug/l	25.0	84	70-130	1	20		
1,3-Dichloropropane	20.8	0.50	ug/l	25.0	83	70-130	0.2	20		
2,2-Dichloropropane	20.3	1.0	ug/l	25.0	81	70-130	3	20		

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

### METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0791 Extracted: 03/22/11</b>										
<b>LCS Dup Analyzed: 03/22/2011 (11C0791-BSD1)</b>										
1,1-Dichloropropene	20.9	0.50	ug/l	25.0	84	70-130	0.5	20		
cis-1,3-Dichloropropene	21.2	0.50	ug/l	25.0	85	70-130	0.9	20		
trans-1,3-Dichloropropene	21.7	0.50	ug/l	25.0	87	70-130	3	20		
Ethylbenzene	20.0	0.50	ug/l	25.0	80	70-130	3	20		
Hexachlorobutadiene	22.4	1.0	ug/l	25.0	90	70-130	2	20		
2-Hexanone	23.2	2.5	ug/l	25.0	93	44-150	6	31		
Iodomethane	24.8	2.5	ug/l	25.0	99	58-138	43	25		RI
Isopropylbenzene	23.3	0.50	ug/l	25.0	93	70-130	2	20		
p-Isopropyltoluene	21.9	0.50	ug/l	25.0	88	70-130	0.05	20		
Methylene Chloride	19.9	1.0	ug/l	25.0	80	70-130	22	20		R6
4-Methyl-2-pentanone (MIBK)	23.4	2.5	ug/l	25.0	94	61-142	0.4	22		
Methyl-tert-butyl Ether (MTBE)	20.1	0.50	ug/l	25.0	80	70-130	0.3	20		
Naphthalene	24.0	2.5	ug/l	25.0	96	65-129	0.1	20		
n-Propylbenzene	21.8	0.50	ug/l	25.0	87	70-130	0.2	20		
Styrene	21.4	0.50	ug/l	25.0	86	70-130	0.9	20		
1,1,1,2-Tetrachloroethane	20.5	0.50	ug/l	25.0	82	70-130	2	20		
1,1,2,2-Tetrachloroethane	21.9	0.50	ug/l	25.0	88	70-130	2	20		
Tetrachloroethene	20.3	0.50	ug/l	25.0	81	70-130	2	20		
Toluene	20.1	0.50	ug/l	25.0	80	70-130	0.8	20		
1,2,3-Trichlorobenzene	23.3	1.0	ug/l	25.0	93	70-130	2	20		
1,2,4-Trichlorobenzene	24.2	1.0	ug/l	25.0	97	70-130	2	20		
1,1,1-Trichloroethane	20.7	0.50	ug/l	25.0	83	70-130	1	20		
1,1,2-Trichloroethane	20.6	0.50	ug/l	25.0	82	70-130	3	20		
Trichloroethene	20.2	0.50	ug/l	25.0	81	70-130	3	20		
Trichlorofluoromethane	22.6	0.50	ug/l	25.0	90	78-149	5	20		
1,2,3-Trichloropropane	22.6	1.0	ug/l	25.0	90	70-130	4	20		
1,2,4-Trimethylbenzene	21.7	0.50	ug/l	25.0	87	70-130	1	20		
1,3,5-Trimethylbenzene	21.5	0.50	ug/l	25.0	86	70-130	0.3	20		
Vinyl Acetate	26.1	1.0	ug/l	25.0	104	57-149	1	21		
Vinyl chloride	19.3	0.50	ug/l	25.0	77	66-134	9	20		
Xylenes, Total	39.6	1.0	ug/l	50.0	79	70-130	3	20		
Freon 113	19.3	2.0	ug/l	25.0	77	63-136	24	20		R6
Surrogate: Dibromofluoromethane	23.0		ug/l	25.0	92	70-130				
Surrogate: Toluene-d8	22.4		ug/l	25.0	90	70-130				
Surrogate: 4-Bromofluorobenzene	22.2		ug/l	25.0	89	70-130				

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

 Sampled: 03/15/11  
 Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Matrix Spike Analyzed: 03/22/2011 (11C0791-MS1)</b>										
<b>Source: PUC0982-02</b>										
Acetone	27.2	10	ug/l	25.0	ND	109	10-150			VI
Benzene	19.8	0.50	ug/l	25.0	ND	79	70-130			
Bromobenzene	22.0	0.50	ug/l	25.0	ND	88	70-130			
Bromochloromethane	20.5	0.50	ug/l	25.0	ND	82	70-130			
Bromodichloromethane	20.6	0.50	ug/l	25.0	ND	83	70-130			
Bromoform	22.7	1.0	ug/l	25.0	ND	91	62-126			
Bromomethane	18.1	1.0	ug/l	25.0	ND	72	55-136			
2-Butanone (MEK)	23.7	2.5	ug/l	25.0	ND	95	22-150			
n-Butylbenzene	22.2	0.50	ug/l	25.0	ND	89	70-130			
sec-Butylbenzene	21.2	0.50	ug/l	25.0	ND	85	70-130			
tert-Butylbenzene	21.5	0.50	ug/l	25.0	ND	86	70-130			
Carbon disulfide	23.5	0.50	ug/l	25.0	ND	94	56-132			
Carbon tetrachloride	21.5	0.50	ug/l	25.0	ND	86	76-131			
Chlorobenzene	20.6	0.50	ug/l	25.0	ND	82	70-130			
Chloroethane	20.1	1.0	ug/l	25.0	ND	80	67-134			
Chloroform	21.4	0.50	ug/l	25.0	1.44	80	70-130			
Chloromethane	17.4	1.0	ug/l	25.0	ND	70	50-135			
2-Chlorotoluene	20.7	0.50	ug/l	25.0	ND	83	70-130			
4-Chlorotoluene	21.9	0.50	ug/l	25.0	ND	88	70-130			
Dibromochloromethane	21.7	0.50	ug/l	25.0	ND	87	70-130			
1,2-Dibromo-3-chloropropane	21.6	2.5	ug/l	25.0	ND	86	60-135			
1,2-Dibromoethane (EDB)	21.1	0.50	ug/l	25.0	ND	84	70-130			
Dibromomethane	21.5	0.50	ug/l	25.0	ND	86	70-130			
1,2-Dichlorobenzene	21.6	0.50	ug/l	25.0	ND	86	70-130			
1,3-Dichlorobenzene	21.3	0.50	ug/l	25.0	ND	85	70-130			
1,4-Dichlorobenzene	21.8	0.50	ug/l	25.0	ND	87	70-130			
Dichlorodifluoromethane	19.0	0.50	ug/l	25.0	ND	76	36-150			
1,1-Dichloroethane	21.6	0.50	ug/l	25.0	1.90	79	70-130			
1,2-Dichloroethane	20.4	0.50	ug/l	25.0	ND	81	68-143			
1,1-Dichloroethene	22.4	0.50	ug/l	25.0	2.71	79	70-130			
cis-1,2-Dichloroethene	21.4	0.50	ug/l	25.0	1.96	78	70-130			
trans-1,2-Dichloroethene	20.2	0.50	ug/l	25.0	ND	81	70-130			
1,2-Dichloropropane	21.2	0.50	ug/l	25.0	ND	85	70-130			
1,3-Dichloropropane	20.6	0.50	ug/l	25.0	ND	83	70-130			
2,2-Dichloropropane	19.9	1.0	ug/l	25.0	ND	79	66-130			

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009  
 Report Number: PUC1004

Sampled: 03/15/11  
 Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Matrix Spike Analyzed: 03/22/2011 (11C0791-MS1)</b>										
<b>Source: PUC0982-02</b>										
1,1-Dichloropropene	21.2	0.50	ug/l	25.0	ND	85	70-130			
cis-1,3-Dichloropropene	20.9	0.50	ug/l	25.0	ND	83	70-130			
trans-1,3-Dichloropropene	21.8	0.50	ug/l	25.0	ND	87	71-132			
Ethylbenzene	20.6	0.50	ug/l	25.0	ND	83	70-130			
Hexachlorobutadiene	23.0	1.0	ug/l	25.0	ND	92	66-129			
2-Hexanone	24.2	2.5	ug/l	25.0	ND	97	18-150			
Iodomethane	24.2	2.5	ug/l	25.0	ND	97	47-141			
Isopropylbenzene	23.2	0.50	ug/l	25.0	ND	93	78-137			
p-Isopropyltoluene	22.2	0.50	ug/l	25.0	ND	89	70-130			
Methylene Chloride	19.8	1.0	ug/l	25.0	ND	79	74-132			
4-Methyl-2-pentanone (MIBK)	23.1	2.5	ug/l	25.0	ND	92	56-145			
Methyl-tert-butyl Ether (MTBE)	19.9	0.50	ug/l	25.0	0.140	79	67-138			
Naphthalene	22.8	2.5	ug/l	25.0	ND	91	54-135			
n-Propylbenzene	22.0	0.50	ug/l	25.0	ND	88	70-130			
Styrene	19.9	0.50	ug/l	25.0	ND	80	51-123			
1,1,1,2-Tetrachloroethane	20.9	0.50	ug/l	25.0	ND	84	70-130			
1,1,2,2-Tetrachloroethane	22.1	0.50	ug/l	25.0	ND	88	69-133			
Tetrachloroethene	21.2	0.50	ug/l	25.0	0.430	83	70-130			
Toluene	20.1	0.50	ug/l	25.0	ND	80	70-130			
1,2,3-Trichlorobenzene	23.4	1.0	ug/l	25.0	ND	94	70-130			
1,2,4-Trichlorobenzene	23.4	1.0	ug/l	25.0	ND	94	66-126			
1,1,1-Trichloroethane	20.7	0.50	ug/l	25.0	ND	83	76-132			
1,1,2-Trichloroethane	21.2	0.50	ug/l	25.0	ND	85	70-130			
Trichloroethene	28.0	0.50	ug/l	25.0	7.93	80	70-130			
Trichlorofluoromethane	23.9	0.50	ug/l	25.0	0.130	95	74-150			
1,2,3-Trichloropropane	22.1	1.0	ug/l	25.0	ND	88	70-130			
1,2,4-Trimethylbenzene	21.7	0.50	ug/l	25.0	ND	87	70-130			
1,3,5-Trimethylbenzene	21.8	0.50	ug/l	25.0	ND	87	61-138			
Vinyl Acetate	24.4	1.0	ug/l	25.0	ND	98	50-150			
Vinyl chloride	19.0	0.50	ug/l	25.0	ND	76	58-139			
Xylenes, Total	40.7	1.0	ug/l	50.0	ND	81	70-130			
Freon 113	19.4	2.0	ug/l	25.0	ND	78	56-148			
Surrogate: Dibromofluoromethane	23.6		ug/l	25.0		94	70-130			
Surrogate: Toluene-d8	22.9		ug/l	25.0		92	70-130			
Surrogate: 4-Bromofluorobenzene	22.8		ug/l	25.0		91	70-130			

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 Project Manager

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 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Matrix Spike Dup Analyzed: 03/22/2011 (11C0791-MSD1)</b>										
<b>Source: PUC0982-02</b>										
Acetone	25.0	10	ug/l	25.0	ND	100	10-150	8	35	VI
Benzene	19.9	0.50	ug/l	25.0	ND	80	70-130	0.4	20	
Bromobenzene	22.0	0.50	ug/l	25.0	ND	88	70-130	0.05	20	
Bromochloromethane	20.9	0.50	ug/l	25.0	ND	83	70-130	2	20	
Bromodichloromethane	20.8	0.50	ug/l	25.0	ND	83	70-130	0.8	20	
Bromoform	22.4	1.0	ug/l	25.0	ND	89	62-126	2	20	
Bromomethane	18.4	1.0	ug/l	25.0	ND	73	55-136	1	24	
2-Butanone (MEK)	23.1	2.5	ug/l	25.0	ND	92	22-150	2	31	
n-Butylbenzene	21.9	0.50	ug/l	25.0	ND	88	70-130	1	20	
sec-Butylbenzene	21.1	0.50	ug/l	25.0	ND	84	70-130	0.6	20	
tert-Butylbenzene	21.0	0.50	ug/l	25.0	ND	84	70-130	2	20	
Carbon disulfide	23.0	0.50	ug/l	25.0	ND	92	56-132	2	20	
Carbon tetrachloride	21.0	0.50	ug/l	25.0	ND	84	76-131	2	20	
Chlorobenzene	20.4	0.50	ug/l	25.0	ND	82	70-130	0.9	20	
Chloroethane	19.9	1.0	ug/l	25.0	ND	80	67-134	0.7	20	
Chloroform	21.4	0.50	ug/l	25.0	1.44	80	70-130	0.05	20	
Chloromethane	18.1	1.0	ug/l	25.0	ND	72	50-135	4	20	
2-Chlorotoluene	20.6	0.50	ug/l	25.0	ND	83	70-130	0.3	20	
4-Chlorotoluene	21.6	0.50	ug/l	25.0	ND	86	70-130	1	20	
Dibromochloromethane	21.7	0.50	ug/l	25.0	ND	87	70-130	0.09	20	
1,2-Dibromo-3-chloropropane	22.9	2.5	ug/l	25.0	ND	91	60-135	6	29	
1,2-Dibromoethane (EDB)	22.0	0.50	ug/l	25.0	ND	88	70-130	4	20	
Dibromomethane	21.4	0.50	ug/l	25.0	ND	86	70-130	0.5	20	
1,2-Dichlorobenzene	21.4	0.50	ug/l	25.0	ND	85	70-130	1	20	
1,3-Dichlorobenzene	20.9	0.50	ug/l	25.0	ND	84	70-130	2	20	
1,4-Dichlorobenzene	21.2	0.50	ug/l	25.0	ND	85	70-130	3	20	
Dichlorodifluoromethane	19.0	0.50	ug/l	25.0	ND	76	36-150	0.05	22	
1,1-Dichloroethane	21.7	0.50	ug/l	25.0	1.90	79	70-130	0.6	20	
1,2-Dichloroethane	20.3	0.50	ug/l	25.0	ND	81	68-143	0.2	20	
1,1-Dichloroethene	22.3	0.50	ug/l	25.0	2.71	78	70-130	0.7	20	
cis-1,2-Dichloroethene	21.1	0.50	ug/l	25.0	1.96	77	70-130	1	20	
trans-1,2-Dichloroethene	20.3	0.50	ug/l	25.0	ND	81	70-130	0.2	20	
1,2-Dichloropropane	20.8	0.50	ug/l	25.0	ND	83	70-130	2	20	
1,3-Dichloropropane	21.1	0.50	ug/l	25.0	ND	84	70-130	2	20	
2,2-Dichloropropane	19.5	1.0	ug/l	25.0	ND	78	66-130	2	20	

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 Project Manager

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 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0791 Extracted: 03/22/11</u></b>										
<b>Matrix Spike Dup Analyzed: 03/22/2011 (11C0791-MSD1)</b>										
<b>Source: PUC0982-02</b>										
1,1-Dichloropropene	20.6	0.50	ug/l	25.0	ND	82	70-130	3	20	
cis-1,3-Dichloropropene	20.6	0.50	ug/l	25.0	ND	82	70-130	1	20	
trans-1,3-Dichloropropene	21.8	0.50	ug/l	25.0	ND	87	71-132	0.2	20	
Ethylbenzene	20.5	0.50	ug/l	25.0	ND	82	70-130	0.7	20	
Hexachlorobutadiene	21.9	1.0	ug/l	25.0	ND	88	66-129	5	21	
2-Hexanone	25.1	2.5	ug/l	25.0	ND	100	18-150	3	25	
Iodomethane	24.5	2.5	ug/l	25.0	ND	98	47-141	0.9	29	
Isopropylbenzene	23.1	0.50	ug/l	25.0	ND	92	78-137	0.3	20	
p-Isopropyltoluene	21.8	0.50	ug/l	25.0	ND	87	70-130	2	20	
Methylene Chloride	20.2	1.0	ug/l	25.0	ND	81	74-132	1	20	
4-Methyl-2-pentanone (MIBK)	22.9	2.5	ug/l	25.0	ND	92	56-145	0.9	26	
Methyl-tert-butyl Ether (MTBE)	20.3	0.50	ug/l	25.0	0.140	81	67-138	2	21	
Naphthalene	24.5	2.5	ug/l	25.0	ND	98	54-135	7	33	
n-Propylbenzene	21.9	0.50	ug/l	25.0	ND	88	70-130	0.3	20	
Styrene	19.7	0.50	ug/l	25.0	ND	79	51-123	1	21	
1,1,1,2-Tetrachloroethane	20.5	0.50	ug/l	25.0	ND	82	70-130	2	20	
1,1,2,2-Tetrachloroethane	22.5	0.50	ug/l	25.0	ND	90	69-133	2	20	
Tetrachloroethene	21.1	0.50	ug/l	25.0	0.430	83	70-130	0.5	20	
Toluene	20.1	0.50	ug/l	25.0	ND	81	70-130	0.3	20	
1,2,3-Trichlorobenzene	24.0	1.0	ug/l	25.0	ND	96	70-130	2	20	
1,2,4-Trichlorobenzene	24.2	1.0	ug/l	25.0	ND	97	66-126	3	20	
1,1,1-Trichloroethane	20.4	0.50	ug/l	25.0	ND	82	76-132	1	20	
1,1,2-Trichloroethane	21.3	0.50	ug/l	25.0	ND	85	70-130	0.3	20	
Trichloroethene	28.2	0.50	ug/l	25.0	7.93	81	70-130	0.4	20	
Trichlorofluoromethane	23.6	0.50	ug/l	25.0	0.130	94	74-150	1	20	
1,2,3-Trichloropropane	22.5	1.0	ug/l	25.0	ND	90	70-130	2	20	
1,2,4-Trimethylbenzene	21.5	0.50	ug/l	25.0	ND	86	70-130	0.7	20	
1,3,5-Trimethylbenzene	21.2	0.50	ug/l	25.0	ND	85	61-138	3	33	
Vinyl Acetate	24.1	1.0	ug/l	25.0	ND	96	50-150	1	23	
Vinyl chloride	19.2	0.50	ug/l	25.0	ND	77	58-139	1	21	
Xylenes, Total	40.4	1.0	ug/l	50.0	ND	81	70-130	0.9	20	
Freon 113	19.2	2.0	ug/l	25.0	ND	77	56-148	1	22	
<i>Surrogate: Dibromofluoromethane</i>	23.0		ug/l	25.0		92	70-130			
<i>Surrogate: Toluene-d8</i>	22.4		ug/l	25.0		90	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	23.0		ug/l	25.0		92	70-130			

#### TestAmerica Phoenix

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 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11

Received: 03/15/11

## METHOD BLANK/QC DATA

### 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0614 Extracted: 03/16/11</u>										
<b>Blank Analyzed: 03/18/2011 (11C0614-BLK1)</b>										
1,4-Dioxane ND 1.0 ug/l										
Surrogate: 1,4-Dioxane-d8 14.6 ug/l 20.0 73 20-105										
Surrogate: Nitrobenzene-d5 16.2 ug/l 20.0 81 30-130										
<b>LCS Analyzed: 03/18/2011 (11C0614-BS1)</b>										
1,4-Dioxane 20.9 1.0 ug/l 20.0 105 85-115										
Surrogate: 1,4-Dioxane-d8 14.7 ug/l 20.0 74 30-105										
Surrogate: Nitrobenzene-d5 16.6 ug/l 20.0 83 35-140										
<b>LCS Dup Analyzed: 03/18/2011 (11C0614-BSD1)</b>										
1,4-Dioxane 20.9 1.0 ug/l 20.0 105 85-115 0.05 20										
Surrogate: 1,4-Dioxane-d8 15.3 ug/l 20.0 76 30-105										
Surrogate: Nitrobenzene-d5 17.2 ug/l 20.0 86 35-140										
<b>Matrix Spike Analyzed: 03/18/2011 (11C0614-MS1)</b>										
1,4-Dioxane 22.6 1.0 ug/l 20.0 1.54 105 70-125										
Surrogate: 1,4-Dioxane-d8 15.2 ug/l 20.0 76 20-105										
Surrogate: Nitrobenzene-d5 16.7 ug/l 20.0 84 30-130										
<b>Matrix Spike Analyzed: 03/18/2011 (11C0614-MS2)</b>										
1,4-Dioxane 21.3 1.0 ug/l 20.0 0.380 104 70-125										
Surrogate: 1,4-Dioxane-d8 27.1 ug/l 20.0 135 20-105										
Surrogate: Nitrobenzene-d5 33.6 ug/l 20.0 168 30-130										
<i>NL, S4</i>										
<b>Matrix Spike Dup Analyzed: 03/18/2011 (11C0614-MSD1)</b>										
1,4-Dioxane 22.2 1.0 ug/l 20.0 1.54 104 70-125 1 20										
Surrogate: 1,4-Dioxane-d8 14.6 ug/l 20.0 73 20-105										
Surrogate: Nitrobenzene-d5 17.3 ug/l 20.0 87 30-130										
<i>NL, S4</i>										

### TestAmerica Phoenix

Kylie Emily  
Project Manager

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7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

## METHOD BLANK/QC DATA

### 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0614 Extracted: 03/16/11</b>										
<b>Matrix Spike Dup Analyzed: 03/18/2011 (11C0614-MSD2)</b>										
1,4-Dioxane	21.5	1.0	ug/l	20.0	0.380	106	70-125	1	20	
Surrogate: 1,4-Dioxane-d8	14.0		ug/l	20.0		70	20-105			
Surrogate: Nitrobenzene-d5	16.9		ug/l	20.0		84	30-130			

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Attention: Jason Hilker

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Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

## DATA QUALIFIERS AND DEFINITIONS

- L3** The associated blank spike recovery was above method acceptance limits.
- N1** See case narrative.
- R1** The RPD/RSD exceeded the method acceptance limit.
- R6** LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
- S4** Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- V1** CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

### TestAmerica Phoenix

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Project Manager

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PUC1004 <23 of 285

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1004

Sampled: 03/15/11  
Received: 03/15/11

## Certification Summary

### TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8260B	Water	X	X
SW8270C	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at [www.testamericainc.com](http://www.testamericainc.com)*

### TestAmerica Phoenix

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Project Manager

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PUC1004 <1 24 of 285



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

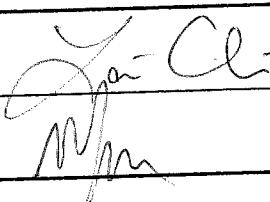
METHOD: 8260B

DATE: 03/17/2011

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department:	Volatiles	Method:	8260B	Instrument #:	GCM S 7
Analyst:	LC	Analysis Date:			03/17/11
<b>Method name saved in the file:</b>					
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12					
2. Did the calibration curve pass the method criteria? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
3. Were any points of the curve removed or replaced? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
If yes, what points were removed or replaced: lowest middle highest					
Why?					
4. Were any individual analyte points removed? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
If yes, what points were removed or replaced: <input checked="" type="checkbox"/> lowest <input type="checkbox"/> middle <input type="checkbox"/> highest					
List of the analytes: Acetone, Methylene chloride, MEK, 2-EVE, MIBK, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene					
Why? LRL, Curve Fit					
5. Circle the calibration model used (you may circle one or more)					
<input checked="" type="checkbox"/> Average Response Factor					
<input checked="" type="checkbox"/> Linear Regression / not forced through zero / simple linear					
<input type="checkbox"/> Equal weighting					
<input type="checkbox"/> Inverse of concentration					
<input type="checkbox"/> Inverse of square of concentration					
<input type="checkbox"/> Linear Regression / forced through zero					
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero					
<input type="checkbox"/> Equal weighting					
<input type="checkbox"/> Inverse of concentration					
<input type="checkbox"/> Inverse of square of concentration					
6. Did the calibration meet the Good Documentation Practices SOP requirements: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					

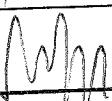
Review Signatures:	Analyst:		Date:	03/18/11
	Reviewer:		Date:	3/17/11

Attachment 2  
ANALYTICAL DATA REVIEW CHECKLIST

SOP PE-VOA-011 R.0  
VOCs in Vapor [ Method No. 8260B AZ Method ]

Analysis Date:	03/17/11	Analyst:	LC
Description	Yes	No	NA <sup>1</sup>
1. BFB (50 ng or less): Verify meets criteria every 12 hours	/	/	/
2. Initial Calibration Curve (5 levels)	/	/	/
- Date of Initial Calibration: 03/17/11.W	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 30% RPD	/	/	/
- All other compounds ≤ 15% RSD or use curve	/	/	/
- Comments:	/	/	(1)
- Second source within historical limits	/	/	/
- Tertiary source within 50 – 150% recovery	/	/	/
3. Continuing Calibration Check (every 12 hours)	/	/	/
- SPCCs must met Min. RF	/	/	/
- CCCs ≤ 20% D	/	/	/
- IS RT ± 30 secs	/	/	/
- IS area –50% to +100%	/	/	/
- All CCVs for reported analytes within historical limits	/	/	/
4. Method Blank	/	/	/
- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/	/	/
- All compounds of interest must be < Reporting Limit	/	/	/
5. Laboratory Control Samples (LCS/LCSD)	/	/	N/A
- Must be analyzed per 20 samples/per matrix/per batch	/	/	/
- LCS/LCSD recoveries within historical limits	/	/	/
- RPD ≤ 25%	/	/	/
- Surrogates within historical limits	/	/	/
6. Samples	/	/	/
- Analyzed within 72 hours of sampling	/	/	/
- IS = RT ± 30 secs and area –50% to +100% of Mid-Point of last ICAL	/	/	/
- Surrogate recoveries within historical limits	/	/	/
- Sample Duplicate performed every 10 samples	/	/	/
Comments:	(1) Bromomethane - NL - See CAR		

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: 	Date: 03/18/11
	Reviewer: 	Date: 3/18/11

<sup>1</sup>) NA: Not Applicable

TestAmerica  
Phoenix

Instrument ID	GCMS 7
Date:	03/17/11
Analyst	LC
Method(s)	8260B
50 ppm Cal. Std.	P01525
2.5 ppm Cal. Std.	P01528
500 / 250 ppm EtOH/TBA Cal. Std.	n/a
50 / 25 ppm EtOH/TBA Cal. Std.	n/a
50 ppm SS Std.	P01537
500 / 250 ppm EtOH/TBA SS Std.	n/a

3<sup>rd</sup> Gas: PTO6459

This table outlines the initial calibration preparation for GCMS 7, GCMS 4 and GCMS 2.

Calibration Number	FINAL CONCENTRATIONS (ppb)				SPIKE AMOUNTS ( $\mu$ L) in 10 mL final volume				
	ISTD / TBA-d9	VOC	Ethanol	TBA	50ppm Ethanol / 25ppm TBA	2.5ppm VOC Cal. Std.	500ppm Ethanol / 250ppm TBA	50ppm VOC Cal. Std.	
1	25/200	0.5	5	2.5	1	2			
2	25/200	1.0	10	5	2	4			
3	25/200	2.0	20	10	4	8			
4	25/200	5.0	50	25			1	1	
5	25/200	10	100	50			2	2	
6*	25/200	25	250	125			5	5	
7	25/200	50	750	375			10	10	
8	25/200	100	1000	500			20	20	
9	25/200	200	2000	1000			40	40	

\*SS/ICVs are at the same level as Calibration point #6 and prepared the same way.

Reviewed By: W.H. Date: 3/18/11

LC 03/18/11

## Response Factor Report GCMS7

Method : C:\NHCHEM\1\GCMS7\METHODS\Q317111.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:09:36 2011  
 Response via : Initial Calibration

Calibration File	1.0 =03171106.D	2.0 =03171107.D	5.0 =03171108.D	5.0 =03171109.D	Avg	% RSD
	0.5 =03171111.D	50.0 =03171112.D	200. 100.	200.		
Compound	0.5	1.0	2.0	5.0	10.0	25.0
I Pentafluorobenzene	1.278	1.131	1.176	1.343	1.199	1.217
T Dichlorodifluoromethane	1.965	1.722	1.705	2.115	2.031	1.991
TMP Chloromethane	1.791	1.789	1.668	1.817	1.677	1.725
TMC Vinyl chloride	0.920	0.793	0.521	0.711	0.801	0.859
TM Bromomethane	1.005	1.039	0.879	0.958	0.956	0.913
TM Chloroethane	1.302	1.243	1.207	1.370	1.280	1.303
TM Trichlorofluoromethane	0.379	0.589	0.400	0.584	0.546	0.597
T Acetone	0.860	0.836	0.621	0.721	0.703	0.678
T Iodomethane	1.047	0.958	0.765	0.861	0.786	0.813
TMC 1,1-Dichloroethene	2.991	2.718	2.262	2.705	2.441	2.445
TM Methylene chloride	0.822	0.931	0.715	0.835	0.766	0.772
Freon 113	1.501	1.617	1.243	1.449	1.271	1.308
T Carbon disulfide	1.773	1.868	1.535	1.752	1.632	1.610
TMP 1,1-Dichloroethane	1.436	1.510	1.090	1.380	1.226	1.231
T cis-1,2-Dichloroethene	0.915	0.789	0.816	0.898	0.803	0.800
T MTBE	0.338	0.306	0.271	0.338	0.314	0.289
T 2-Butanone (MEK)	1.474	1.291	1.359	1.505	1.426	1.329
T Vinyl acetate	1.151	1.062	1.049	1.207	1.108	1.096
T 2-Butene	0.743	0.594	0.581	0.695	0.640	0.629
S Dibromofluoromethane	0.873	0.905	0.802	0.893	0.804	0.830
TM 1,2-Dichloroethane	0.981	0.938	0.900	1.069	0.997	0.987
TM 1,1,1-Trichloroethane						
I 1,4-Difluorobenzene	0.676	0.609	0.621	0.674	0.653	0.630
T 1,1-Dichloropropene	0.426	0.417	0.414	0.477	0.459	0.458
TM Carbon tetrachloride	1.854	1.747	1.665	1.787	1.702	1.685
TM Benzene	0.220	0.217	0.194	0.215	0.208	0.199
T Dibromomethane	0.525	0.461	0.462	0.521	0.468	0.481
TMC 1,2-Dichloropropane	0.455	0.415	0.412	0.467	0.422	0.428
TM Trichloroethene	0.507	0.483	0.464	0.551	0.511	0.496
TM Bromodichloromethane	0.588	0.595	0.568	0.665	0.626	0.630
T 2-Chlorovinylethylether	0.111	0.123	0.108	0.100	0.086	0.080
TM cis-1,3-Dichloropropene	0.611	0.602	0.611	0.602	0.611	0.602

4-Methyl-2-pentanone (MIBK)														
trans-1,3-dichloropropene														
TMP	0.230	0.224	0.221	0.244	0.234	0.228	0.218	0.221	0.216	0.226	0.222	0.226	0.222	0.226
T	1.1,2-Trichloroethane	1.506	1.274	1.214	1.274	1.213	1.236	1.199	1.217	1.214	1.261	1.261	1.261	1.261
T	Toluene-d8	1.070	0.895	0.962	1.017	0.968	0.969	0.963	0.955	0.954	0.973	0.973	0.973	0.973
TMC	Toluene													
Chlorobenzene-d5														
T	1,3-Dichloropropane	0.535	0.569	0.533	0.642	0.578	0.578	0.552	0.560	0.543	0.566	0.566	0.566	0.566
T	2-Hexanone	0.421	0.294	0.319	0.347	0.331	0.338	0.336	0.340	0.336	0.194	0.189	0.189	0.189
T	Dibromochloromethane	0.265	0.251	0.278	0.321	0.291	0.283	0.293	0.282	0.282	0.284	0.284	0.284	0.284
T	1,2-Dibromoethane	0.491	0.416	0.421	0.457	0.451	0.451	0.444	0.448	0.448	0.448	0.448	0.448	0.448
T	Tetrachloroethane	0.419	0.370	0.348	0.372	0.362	0.362	0.359	0.370	0.370	0.370	0.370	0.370	0.370
T	1,1,1,2-Tetrachloroethane	0.278	1.127	1.115	1.215	1.160	1.173	1.147	1.185	1.173	1.175	1.175	1.175	1.175
T	Chlorobenzene	2.432	2.116	2.077	2.272	2.199	2.221	2.180	2.235	2.188	2.214	2.214	2.214	2.214
T	Ethylbenzene	0.914	0.710	0.745	0.803	0.758	0.769	0.749	0.770	0.760	0.775	0.775	0.775	0.775
TMC	Ethylbenzene													
T	m,p-Xylenes	1.044	1.064	1.123	1.265	1.177	1.217	1.199	1.239	1.255	1.176	1.176	1.176	1.176
T	Styrene	0.865	0.741	0.720	0.770	0.734	0.734	0.747	0.744	0.744	0.54	0.54	0.54	0.54
T	o-Xylene	0.666	0.563	0.532	0.559	0.520	0.531	0.517	0.534	0.509	0.548	0.548	0.548	0.548
S	4-Bromofluorobenzene													
1,4-Dichlorobenzene-d4														
TMP	Bromoform	0.346	0.342	0.330	0.398	0.372	0.377	0.377	0.381	0.334	0.362	0.362	0.362	0.362
T	1,1,2-Tetrachloroethane	0.776	0.777	0.741	0.769	0.759	0.732	0.718	0.714	0.603	0.732	0.732	0.732	0.732
T	1,2,3-Trichloropropane	0.117	0.118	0.161	0.182	0.165	0.168	0.160	0.158	0.143	0.159	0.159	0.159	0.159
T	Isopropylbenzene	4.005	3.607	3.797	3.945	4.018	3.966	3.899	3.859	3.357	3.828	3.828	3.828	3.828
T	Bromobenzene	0.821	0.849	0.879	0.932	0.930	0.936	0.909	0.898	0.795	0.883	0.883	0.883	0.883
T	n-Propylbenzene	5.622	5.275	5.271	5.811	5.635	5.518	5.473	4.873	4.873	5.465	5.465	5.465	5.465
T	2-Chlorotoluene	3.635	3.131	3.065	3.274	3.275	3.246	3.176	3.139	2.874	3.202	3.202	3.202	3.202
T	4-Chlorotoluene	3.455	2.901	3.111	3.329	3.224	3.287	3.194	3.123	2.942	3.174	3.174	3.174	3.174
T	1,3,5-Trimethylbenzene	3.482	3.055	3.159	3.421	3.445	3.402	3.291	3.314	3.201	3.308	3.308	3.308	3.308
T	tert-Butylbenzene	2.867	2.682	2.696	2.874	2.922	2.887	2.853	2.812	2.753	2.816	2.816	2.816	2.816
T	1,2,4-Trimethylbenzene	3.429	3.228	3.251	3.411	3.407	3.411	3.331	3.302	3.155	3.325	3.325	3.325	3.325
T	sec-Butylbenzene	4.909	4.685	4.781	4.988	4.889	4.960	4.835	4.770	4.628	4.827	4.827	4.827	4.827
T	1,3-Dichlorobenzene	1.922	1.696	1.781	1.842	1.831	1.832	1.788	1.772	1.732	1.800	1.800	1.800	1.800
T	1,4-Dichlorobenzene	0.218	0.181	1.769	1.830	1.781	1.799	1.774	1.772	1.748	1.812	1.812	1.812	1.812
T	p-Isopropyltoluene	3.621	3.386	3.554	3.772	3.840	3.866	3.737	3.736	3.694	3.694	3.694	3.694	3.694
T	1,2-Dichlorobenzene	1.676	1.479	1.524	1.652	1.572	1.593	1.551	1.529	1.511	1.565	1.565	1.565	1.565
T	4,083	3.836	3.893	4.308	4.176	4.341	4.160	4.146	4.018	4.107	4.107	4.107	4.107	4.107
T	n-Butylbenzene	0.086	0.108	0.092	0.106	0.101	0.097	0.096	0.094	0.094	0.098	0.098	0.098	0.098
T	1,2-Dibromo-3-chloropropane	0.920	1.036	0.925	1.051	0.955	1.090	1.036	1.068	1.017	1.011	1.011	1.011	1.011
T	1,2,4-Trichlorobenzene	1.322	1.200	1.403	1.267	1.459	1.356	1.419	1.298	1.341	1.341	1.341	1.341	1.341
T	Naphthalene	0.624	0.630	0.633	0.635	0.661	0.684	0.649	0.662	0.632	0.646	0.646	0.646	0.646
T	Hexachlorobutadiene	0.835	0.763	0.778	0.889	0.792	0.905	0.863	0.763	0.863	0.824	0.824	0.824	0.824

(#) = Out of Range

Thu Mar 17 14:51:40 2011

## Calibration Status Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
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2	1.0	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D
3	2.0	2	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D
4	5.0	5	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D
5	10.0	10	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D
6	25.0	25	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D
7	50.0	50	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D
8	100.	100	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D
9	200.	200	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	Mar 17 14:03 2011	Mar 17 13:56 2011	17 Mar 2011 9:12 am
2	1.0	Mar 17 14:03 2011	Mar 17 13:57 2011	17 Mar 2011 9:43 am
3	2.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:14 am
4	5.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:45 am
5	10.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:15 am
6	25.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:46 am
7	50.0	Mar 17 14:04 2011	Mar 17 14:01 2011	17 Mar 2011 12:17 pm
8	100.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 12:48 pm
9	200.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 1:19 pm

031711.M                    Thu Mar 17 14:51:31 2011

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M

## Compound List Report GCMS7

C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 Total Cpnds : 76

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I Pentafluorobenzene	168	10.60	1.000	A	0	A	L
2	T Dichlorodifluoromethane	85	4.60	0.434	A	2	A	B
3	T Chloromethane	50	4.89	0.461	A	1	A	B
4	T Vinyl chloride	62	5.18	0.489	A	1	A	B
5	T Bromomethane	94	5.78	0.545	L	1	A	B
6	T Chloroethane	64	5.98	0.564	A	1	A	L
7	T Trichlorofluoromethane	101	6.78	0.639	A	1	A	L
8	T Acetone	43	6.94	0.654	L	1	A	B
9	T Iodomethane	142	7.57	0.714	L	1	A	B
10	T 1,1-Dichloroethene	96	7.51	0.708	A	2	A	B
11	T Methylene chloride	84	7.71	0.727	A	2	A	B
12	T Freon 113	101	7.77	0.733	A	2	A	B
13	T Carbon disulfide	76	8.03	0.757	A	0	A	B
14	T trans-1,2-Dichloroethene	96	8.59	0.810	A	2	A	B
15	T MTBE	73	8.74	0.824	A	1	A	B
16	T 1,1-Dichloroethane	63	8.92	0.841	A	2	A	L
17	T Vinyl acetate	43	9.08	0.857	A	1	A	B
18	T 2-Butanone (MEK)	72	9.47	0.893	L	1	A	B
19	T cis-1,2-Dichloroethene	96	9.66	0.911	A	2	A	B
20	T Bromochloromethane	128	9.87	0.931	A	2	A	B
21	T Chloroform	83	9.93	0.936	A	1	A	B
22	T 2,2-Dichloropropane	77	10.04	0.947	A	1	A	B
23	S Dibromofluoromethane	113	10.09	0.951	A	0	A	B
24	T 1,2-Dichloroethane	62	10.78	1.017	A	1	A	B
25	T 1,1,1-Trichloroethane	97	10.91	1.029	A	2	A	B
26	I 1,4-Difluorobenzene	114	11.73	1.000	A	1	A	B
27	T 1,1-Dichloropropene	75	11.15	0.950	A	2	A	B
28	T Carbon tetrachloride	117	11.39	0.971	A	1	A	B
29	T Benzene	78	11.44	0.976	A	1	A	B
30	T Dibromomethane	93	12.17	1.037	A	2	A	B
31	T 1,2-Dichloropropene	63	12.21	1.041	A	1	A	B
32	T Trichloroethene	95	12.27	1.046	A	2	A	B
33	T Bromodichloromethane	83	12.33	1.051	A	2	A	B
34	T 2-Chlorovinylethylether	63	12.86	1.097	L	1	A	B
35	T cis-1,3-Dichloropropene	75	13.16	1.122	A	1	A	B
36	T 4-Methyl-2-pentanone (MIBK)	43	13.31	1.135	A	2	A	B
37	T trans-1,3-Dichloropropene	75	13.73	1.171	A	1	A	B
38	T 1,1,2-Trichloroethane	83	13.95	1.189	A	2	A	B
39	S Toluene-d8	98	14.12	1.204	A	0	A	B
40	T Toluene	92	14.21	1.212	A	1	A	B
41	I Chlorobenzene-d5	117	16.07	1.000	A	0	A	B
42	T 1,3-Dichloropropane	76	14.27	0.888	A	1	A	B
43	T 2-Hexanone	43	14.47	0.900	A	2	A	B
44	T Dibromochloromethane	129	14.64	0.911	A	1	A	B
45	T 1,2-Dibromoethane	107	14.98	0.932	A	2	A	B
46	T Tetrachloroethene	166	15.21	0.946	A	2	A	B
47	T 1,1,1,2-Tetrachloroethane	131	16.01	0.996	A	2	A	B
48	T Chlorobenzene	112	16.12	1.003	A	2	A	B
49	T Ethylbenzene	91	16.37	1.019	A	1	A	B
50	T m,p-Xylenes	106	16.64	1.035	A	1	A	B
51	T Styrene	104	17.09	1.064	A	1	A	B
52	T o-Xylene	106	17.19	1.070	A	1	A	B
53	S 4-Bromofluorobenzene	95	17.75	1.105	A	2	A	B
54	1,4-Dichlorobenzene-d4	152	19.53	1.000	A	2	A	B
55	T Bromoform	173	16.81	0.861	A	1	A	B
56	T 1,1,2,2-Tetrachloroethane	83	17.18	0.879	A	2	A	B
57	T 1,2,3-Trichloropropane	110	17.38	0.890	A	1	A	B
58	T Isopropylbenzene	105	17.69	0.906	A	1	A	B
59	T Bromobenzene	156	18.05	0.924	A	2	A	B

32 of 285  
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60	T	n-Propylbenzene	91	18.30	0.937	A	1	A	B
61	T	2-Chlorotoluene	91	18.44	0.944	A	1	A	R
62	T	4-Chlorotoluene	91	18.55	0.949	A	1	A	R
63	T	1,3,5-Trimethylbenzene	105	18.70	0.957	A	1	A	B
64	T	tert-Butylbenzene	119	19.09	0.977	A	1	A	B
65	T	1,2,4-Trimethylbenzene	105	19.23	0.984	A	1	A	B
66	T	sec-Butylbenzene	105	19.37	0.992	A	2	A	R
67	T	1,3-Dichlorobenzene	146	19.48	0.997	A	2	A	R
68	T	1,4-Dichlorobenzene	146	19.57	1.002	A	2	A	B
69	T	p-Isopropyltoluene	119	19.61	1.004	A	2	A	B
70	T	1,2-Dichlorobenzene	146	20.02	1.025	A	2	A	B
71	T	n-Butylbenzene	91	20.12	1.030	A	1	A	B
72	T	1,2-Dibromo-3-chloropropane	157	20.58	1.054	A	1	A	B
73	T	1,2,4-Trichlorobenzene	180	22.28	1.141	A	1	A	B
74	T	Naphthalene	128	22.63	1.158	A	0	A	B
75	T	Hexachlorobutadiene	225	22.68	1.161	A	1	A	B
76	T	1,2,3-Trichlorobenzene	180	22.90	1.172	A	1	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

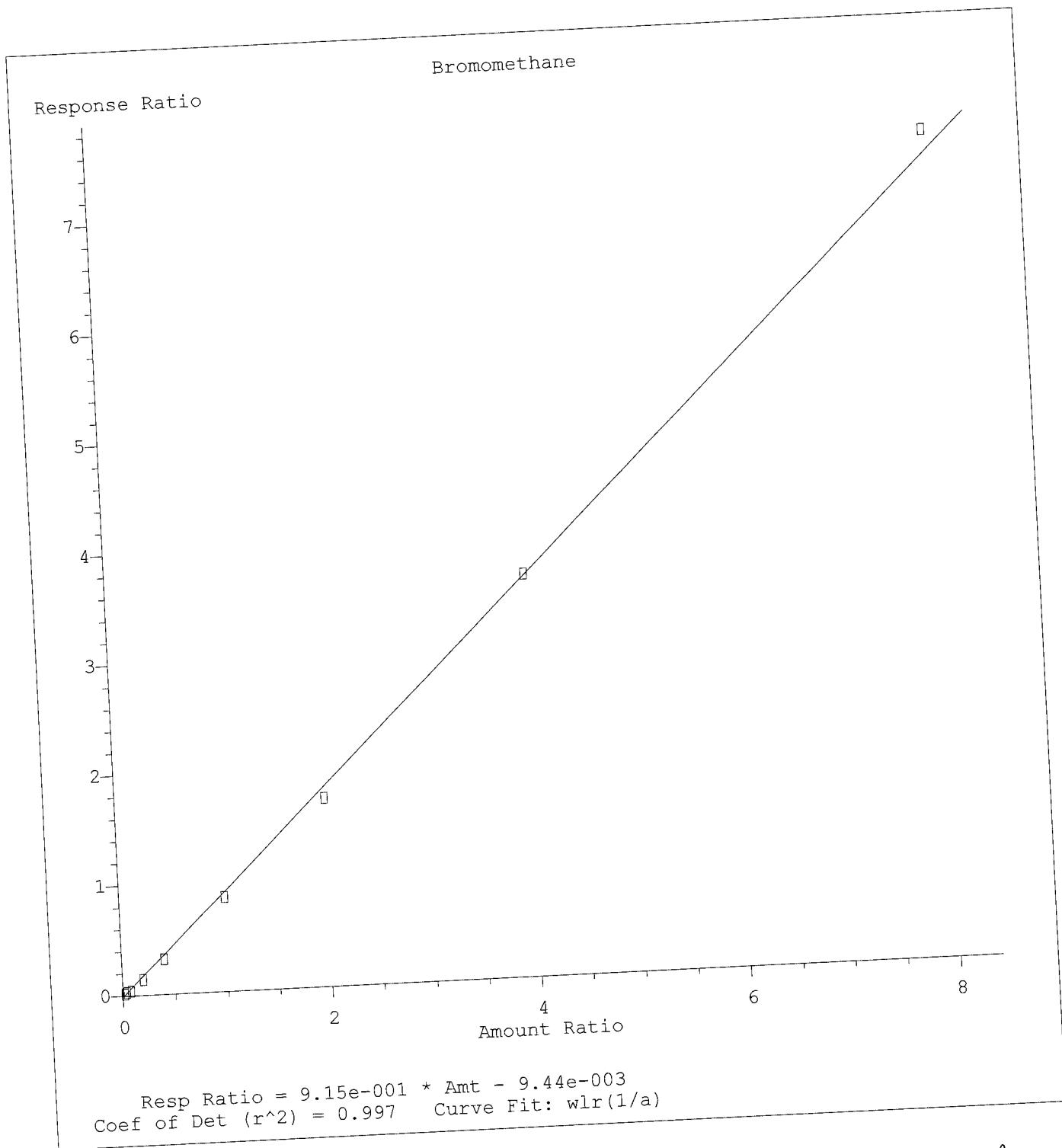
A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

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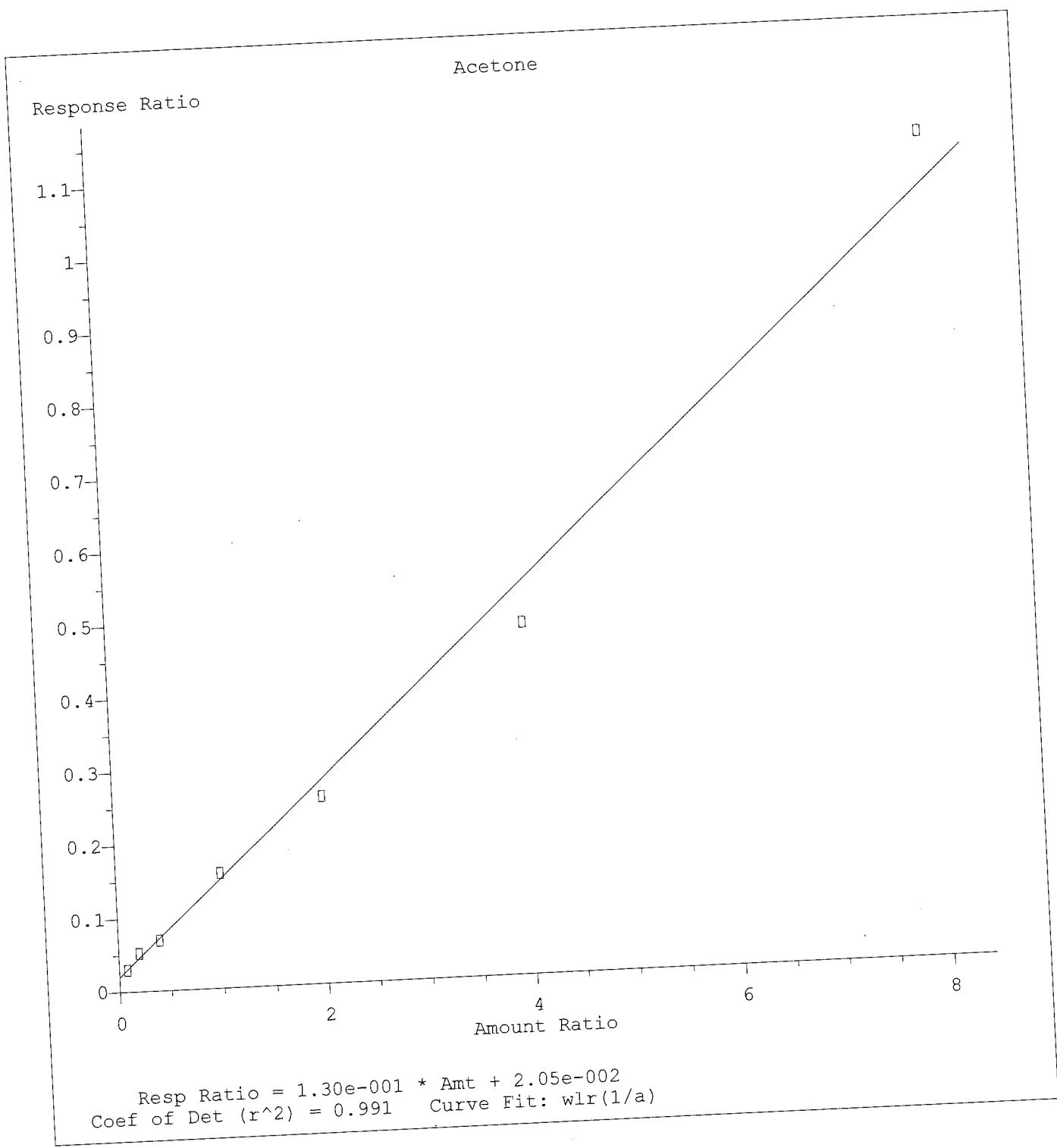
031711.M Thu Mar 17 14:51:24 2011

✓



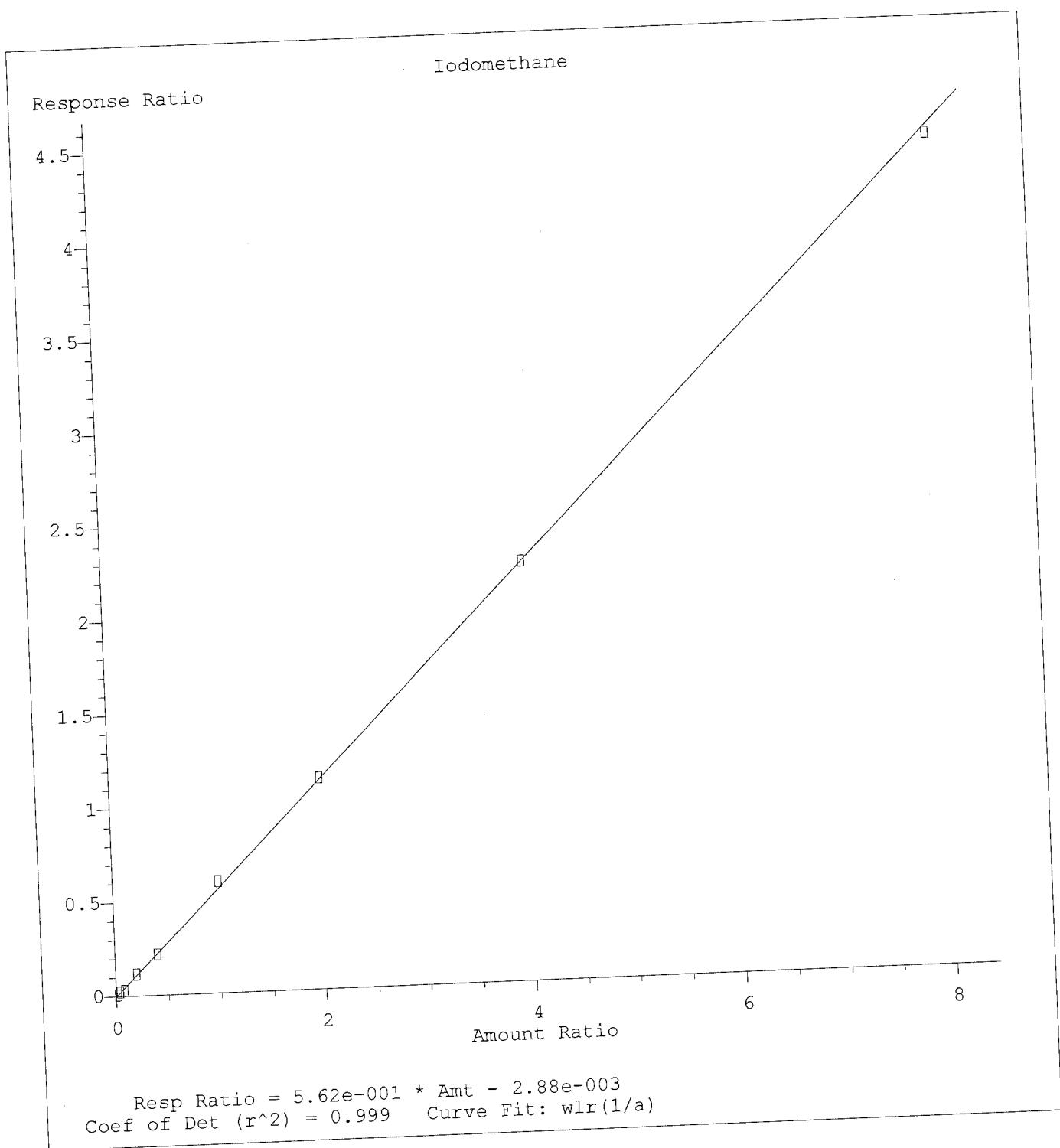
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

2/11  
03/11



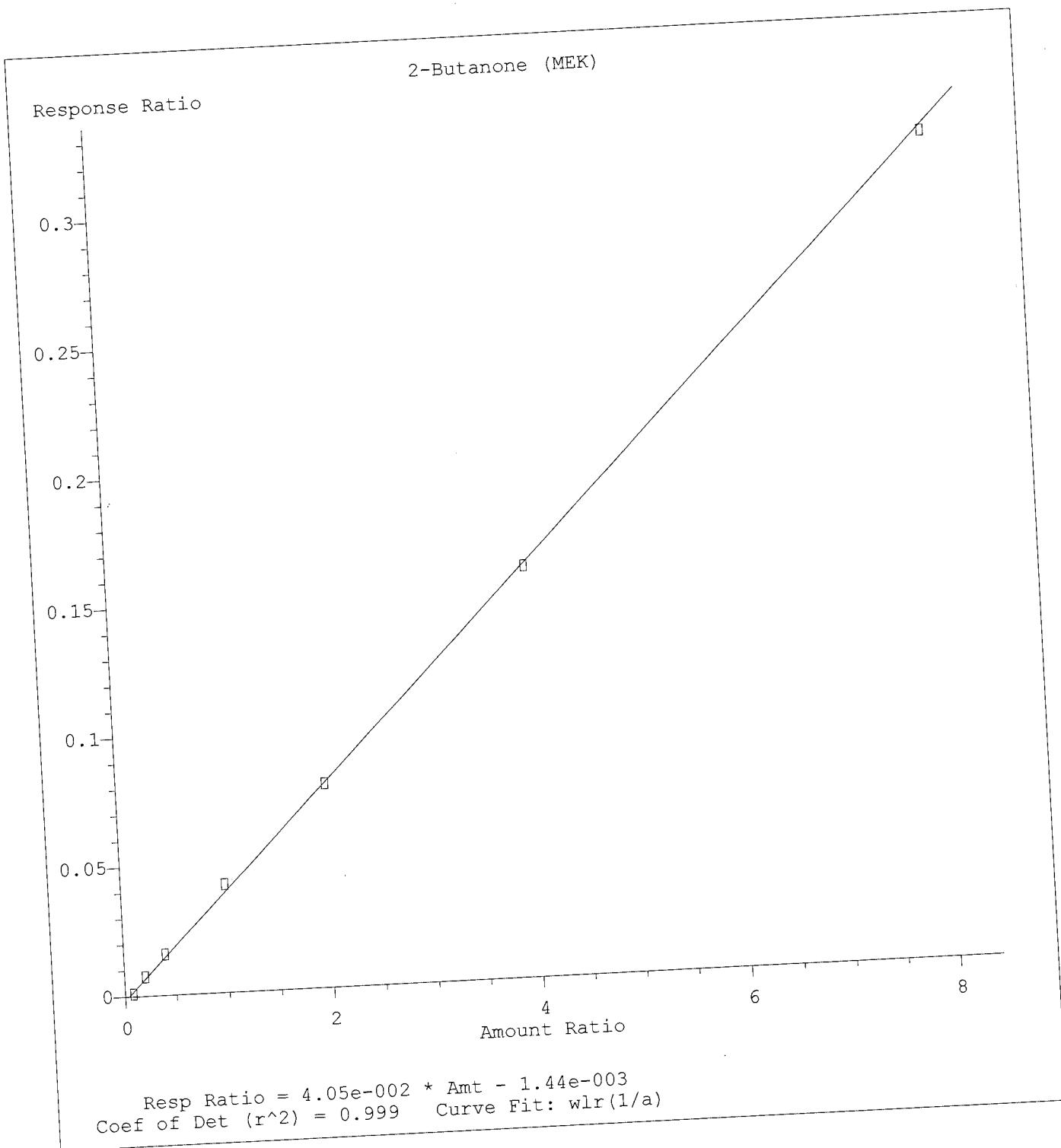
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

3 4/11  
ca 03/8/11



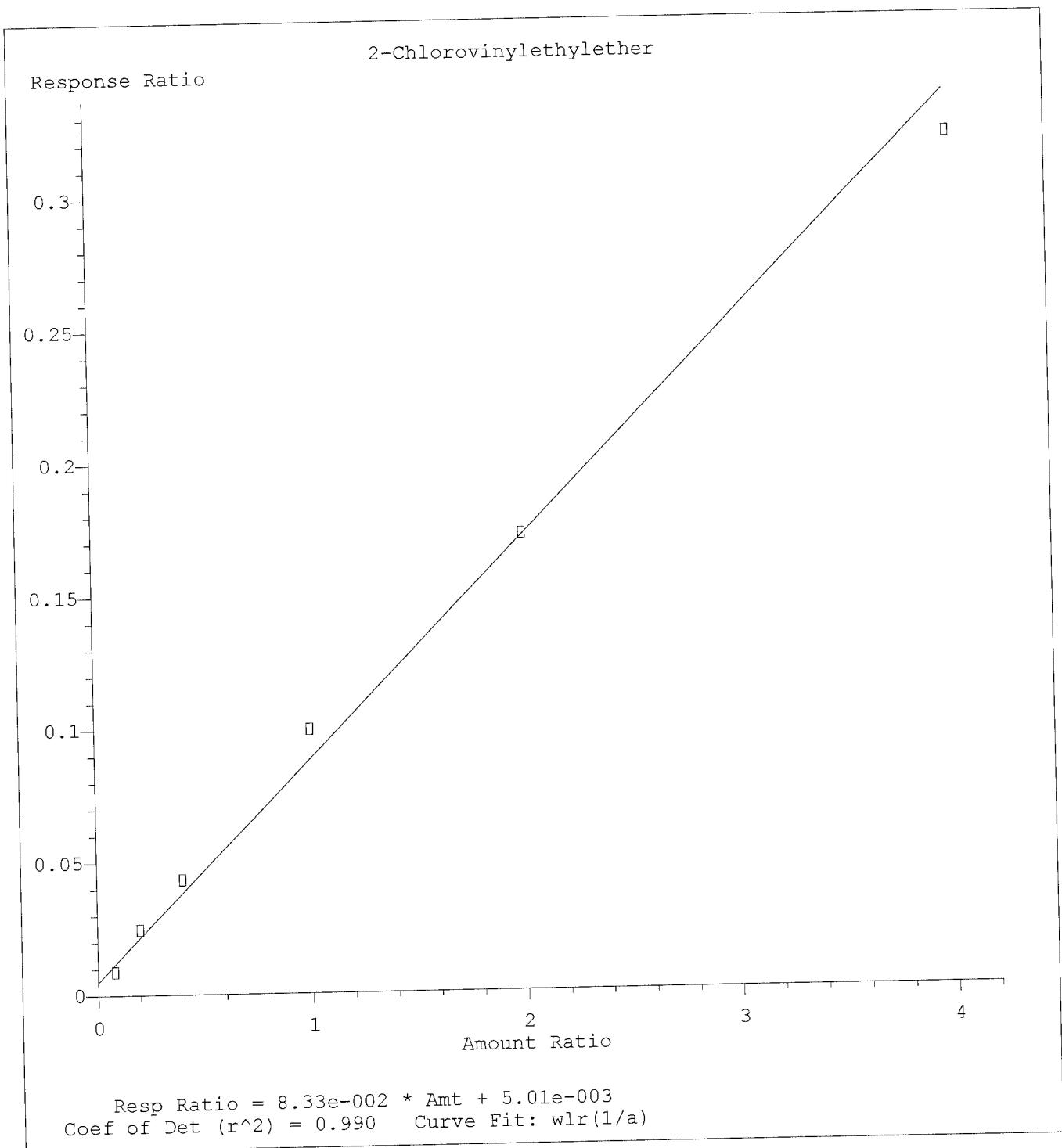
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

MS H/M  
CC 03/18/11



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

3/4/11  
 CC 03/18/11



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

m/m  
203/1811

### Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\031711

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03171101.d	1.	TUNE		17 Mar 2011 06:59
2	1	03171102.d	1.	TUNE		17 Mar 2011 07:16
3	16	03171103.d	1.	25 PPB CCV		17 Mar 2011 07:36
4	1	03171104.d	1.	BLANK		17 Mar 2011 08:10
5	2	03171105.d	1.	BLANK		17 Mar 2011 08:41
6	3	03171106.d	1.	0.5 PPB		17 Mar 2011 09:12
7	4	03171107.d	1.	1.0 PPB		17 Mar 2011 09:43
8	5	03171108.d	1.	2.0 PPB		17 Mar 2011 10:14
9	6	03171109.d	1.	5.0 PPB		17 Mar 2011 10:45
10	7	03171110.d	1.	10 PPB		17 Mar 2011 11:15
11	8	03171111.d	1.	25 PPB		17 Mar 2011 11:46
12	9	03171112.d	1.	50 PPB		17 Mar 2011 12:17
13	10	03171113.d	1.	100 PPB		17 Mar 2011 12:48
14	12	03171114.d	1.	200 PPB		17 Mar 2011 13:19
15	13	03171115.d	1.	SS		17 Mar 2011 13:50
16	16	03171116.d	1.	TERTIARY GAS		17 Mar 2011 14:20
17	1	03171117.d	1.	TUNE		17 Mar 2011 14:47
18	1	03171118.d	1.	25 PPB CCV		17 Mar 2011 15:06
19	2	03171119.d	1.	-BS1		17 Mar 2011 15:37
20	3	03171120.d	1.	-BSD1		17 Mar 2011 16:07
21	4	03171121.d	1.	-BLK1		17 Mar 2011 16:38
22	5	03171122.d	1.	PUC1019-01@16:20		17 Mar 2011 17:09
23	6	03171123.d	1.	PUC1019-02@16:22		17 Mar 2011 17:40
24	7	03171124.d	1.	PUC1025-02@16:25	5X	17 Mar 2011 18:10
25	8	03171125.d	1.	PUC1025-01	1X	17 Mar 2011 18:41
26	9	03171126.d	1.	PUC1025-01	1X	17 Mar 2011 19:12
27	13	03171127.d	1.	PUC1025-01DUP1		17 Mar 2011 19:43
28	16	03171128.d	1.	PUC0795-01		17 Mar 2011 20:13
29	1	03171129.d	1.	PUC0795-02		17 Mar 2011 20:44
30	2	03171130.d	1.	PUC0795-03		17 Mar 2011 21:15
31	3	03171131.d	1.	PUC0795-04		17 Mar 2011 21:46
32	4	03171132.d	1.	PUC0795-05		17 Mar 2011 22:17
33	5	03171133.d	1.	PUC0795-06		17 Mar 2011 22:48
34	6	03171134.d	1.	11C0657-MS1		17 Mar 2011 23:19
35	7	03171135.d	1.	11C0657-MSD1		17 Mar 2011 23:50
36	10	03171136.d	1.	BLK		18 Mar 2011 00:21
37	12	03171137.d	1.	BLK		18 Mar 2011 00:51

3/18/2011  
39 of 285

TestAmerica  
Phoenix

DATE: 03/17/11

ANALYST: LC

CALIBRATION METHOD(S): 031411.m

## GC/MS 7 DAILY LOG SUMMARY

QC BATCH # (s):

Air H<sub>2</sub>O  
11C0657, 11C0659

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\031711

New Curve - 031711.m

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	03171101	Tune	2uL	N/A	8260B	H <sub>2</sub> O	DNU - Infrared Std.
1	02	L	L				
16	03	25 PPB CCV	1x10mL				DNU - Acetone
1	04	Blank	L				DNU - Clean Out
2	05	L	L				
3	06	0.5 PPB	L				
4	07	1.0	L				
5	08	2.0	L				
6	09	5.0	L				
7	10	10	L				
8	11	25	L				
9	12	50	L				
10	13	100	L				
12	14	200	L				
13	15	5S	L				
16	16	Tertiary Gas	1x10cc			Air	Bromomethane 49%
1	17	Tune	2uL			H <sub>2</sub> O	
1	18	25 PPB CCV	1x10mL				Acet↑
2	19	11C0657 - BS1	L				iodo, cd↑ 11C0659-B
3	20	-BSA1	L				iodo↑
4	21	-BLK1	L				B
5	22	PLIC0795-01A	1x10cc			Ar	16:20
6	23	L 02A	L				16:22
7	24	1025-02A	L				16:25
8	25	1025-01A @5X 2cc → 10cc	L				16:30
9	26	-01 A @1X	1x10cc				16:27
13	27	-01 DUP L	L				16:32 11C0657-DUPL
16	28	PLIC0795-01A	1x10mL	≤2		H <sub>2</sub> O	SOURCE
1	29	02A	L	≤2			"
2	30	03A	L	≤2			

### STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PU01537

CALIBRATION STD: 1525 / PU01528

Internal Std: 1522

IS/Surrogate/BFB: 1534 / PU01261

LOT #: 3<sup>o</sup> Gas: PT06459

### REQUIRED REVIEWS

#### ARCHON REVIEWED

By / Date: LC 03/17/11

#### SEQUENCE REVIEWED

By / Date: LC 03/17/11

#### FINAL REVIEWER / Date:

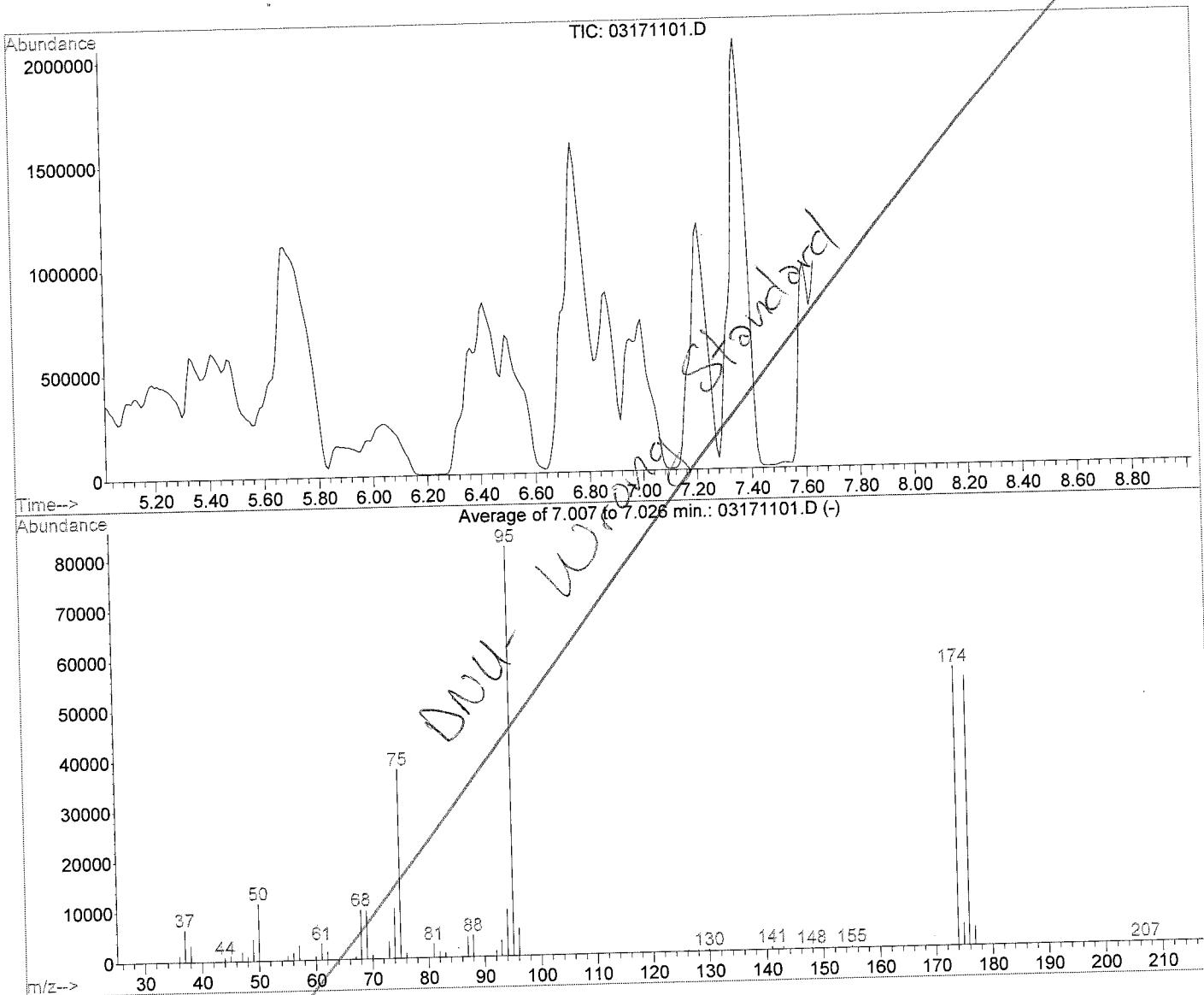
M 1/1/11

40 of 285

Page 50 of 100

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171101.D Vial: 1  
 Acq On : 17 Mar 2011 6:59 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

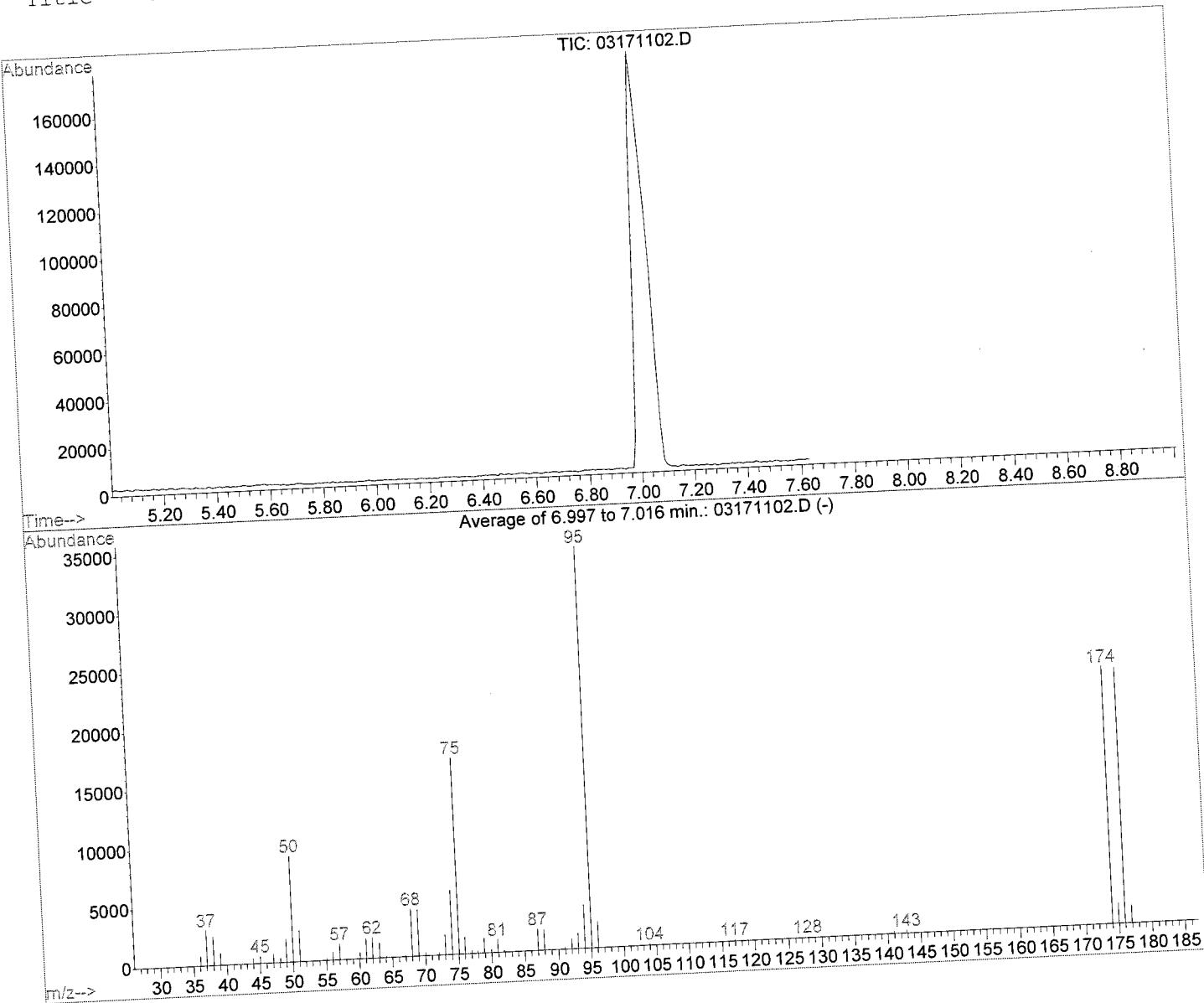


Spectrum Information: Average of 7.007 to 7.026 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	13.9	11317	FAIL*
75	95	30	60	46.1	37626	PASS
95	95	100	100	100.0	81675	PASS
96	95	5	9	6.6	5429	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.1	55616	PASS
175	174	5	9	7.8	4344	PASS
176	174	95	101	96.5	53661	PASS
177	176	5	9	6.7	3599	PASS

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171102.D Vial: 1  
 Acq On : 17 Mar 2011 7:16 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B



Spectrum Information: Average of 6.997 to 7.016 min.

Target Mass	Rel. to 95	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.3	8966	PASS
75	95	30	60	48.9	16685	PASS
95	95	100	100	100.0	34109	PASS
96	95	5	9	6.4	2195	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.1	21869	PASS
175	174	5	9	7.8	1697	PASS
176	174	95	101	99.3	21715	PASS
177	176	5	9	6.7	1463	PASS

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	183444	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	325784	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	270420	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	118494	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	106054	24.28	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.12%	
39) Toluene-d8	14.11	98	384866	24.78	ug/L	0.00
Spiked Amount 25.000			Recovery	=	99.12%	
53) 4-Bromofluorobenzene	17.75	95	134955	24.39	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.56%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	203514	22.97	ug/L	100
3) Chloromethane	4.90	50	349427	27.92	ug/L	100
4) Vinyl chloride	5.19	62	318799	26.09	ug/L	99
5) Bromomethane	5.78	94	141014	26.05	ug/L	96
6) Chloroethane	5.99	64	169039	25.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	229398	25.07	ug/L	99
8) Acetone	6.93	43	87501	Below Cal		97
9) Iodomethane	7.58	142	98773	23.31	ug/L	98
10) 1,1-Dichloroethene	7.52	96	122197	26.18	ug/L	94
11) Methylene chloride	7.71	84	141233	23.11	ug/L	100
12) Freon 113	7.78	101	141514	23.82	ug/L	99
13) Carbon disulfide	8.03	76	424756	25.69	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	133127	23.44	ug/L	97
15) MTBE	8.73	73	229415	23.89	ug/L	98
16) 1,1-Dichloroethane	8.92	63	275296	23.59	ug/L	99
17) Vinyl acetate	9.08	43	220376	24.39	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7147	23.08	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	138298	23.44	ug/L	98
20) Bromochloromethane	9.87	128	51964	23.76	ug/L	97
21) Chloroform	9.93	83	226993	23.52	ug/L	100
22) 2,2-Dichloropropane	10.03	77	199254	24.74	ug/L	99
24) 1,2-Dichloroethane	10.78	62	137605	24.05	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	172734	23.93	ug/L	98
27) 1,1-Dichloropropene	11.15	75	199034	23.87	ug/L	99
28) Carbon tetrachloride	11.39	117	140086	24.16	ug/L	99
29) Benzene	11.44	78	525784	23.82	ug/L	100
30) Dibromomethane	12.17	93	59810	22.72	ug/L	99
31) 1,2-Dichloropropane	12.21	63	147015	23.80	ug/L	100
32) Trichloroethene	12.26	95	130559	23.47	ug/L	100
33) Bromodichloromethane	12.33	83	152627	23.43	ug/L	97
34) 2-Chlorovinylethylether	12.86	63	34857	23.00	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	192256	24.47	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	79041	22.82	ug/L	98
37) trans-1,3-Dichloropropene	13.73	75	148191	24.15	ug/L	98
38) 1,1,2-Trichloroethane	13.95	83	69853	23.20	ug/L	96
40) Toluene	14.21	92	301555	24.42	ug/L	99
42) 1,3-Dichloropropane	14.27	76	144303	23.31	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171103.D 031411.M Thu Mar 17 13:54:27 2011

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	52512	24.58	ug/L	# 99
44) Dibromochloromethane	14.65	129	85525	24.04	ug/L	98
45) 1,2-Dibromoethane	14.98	107	75677	25.06	ug/L	99
46) Tetrachloroethene	15.20	166	116159	23.97	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	93416	24.16	ug/L	98
48) Chlorobenzene	16.12	112	306146	24.04	ug/L	97
49) Ethylbenzene	16.38	91	563689	24.00	ug/L	99
50) m,p-Xylenes	16.64	106	197842	23.89	ug/L	100
51) Styrene	17.09	104	313010	24.57	ug/L	100
52) o-Xylene	17.19	106	188426	23.54	ug/L	100
55) Bromoform	16.81	173	45375	27.10	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	85826	24.73	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	19634	26.45	ug/L	97
58) Isopropylbenzene	17.70	105	467417	25.22	ug/L	100
59) Bromobenzene	18.05	156	105243	25.16	ug/L	98
60) n-Propylbenzene	18.30	91	657511	25.12	ug/L	100
61) 2-Chlorotoluene	18.44	91	374515	24.85	ug/L	99
62) 4-Chlorotoluene	18.55	91	377509	25.07	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	397648	25.20	ug/L	99
64) tert-Butylbenzene	19.09	119	338640	25.00	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	398096	24.77	ug/L	98
66) sec-Butylbenzene	19.38	105	570587	24.77	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	211237	24.59	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	208652	24.28	ug/L	99
69) p-Isopropyltoluene	19.61	119	450706	25.20	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	179425	24.69	ug/L	99
71) n-Butylbenzene	20.11	91	503050	25.42	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	11007	24.17	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	125573	24.32	ug/L	99
74) Naphthalene	22.62	128	162763	24.75	ug/L	100
75) Hexachlorobutadiene	22.68	225	79503	27.59	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	100849	23.50	ug/L	98

44 of 285

(#) = qualifier out of range (m) = manual integration  
 03171103.D 031411.M Thu Mar 17 13:54:27 2011

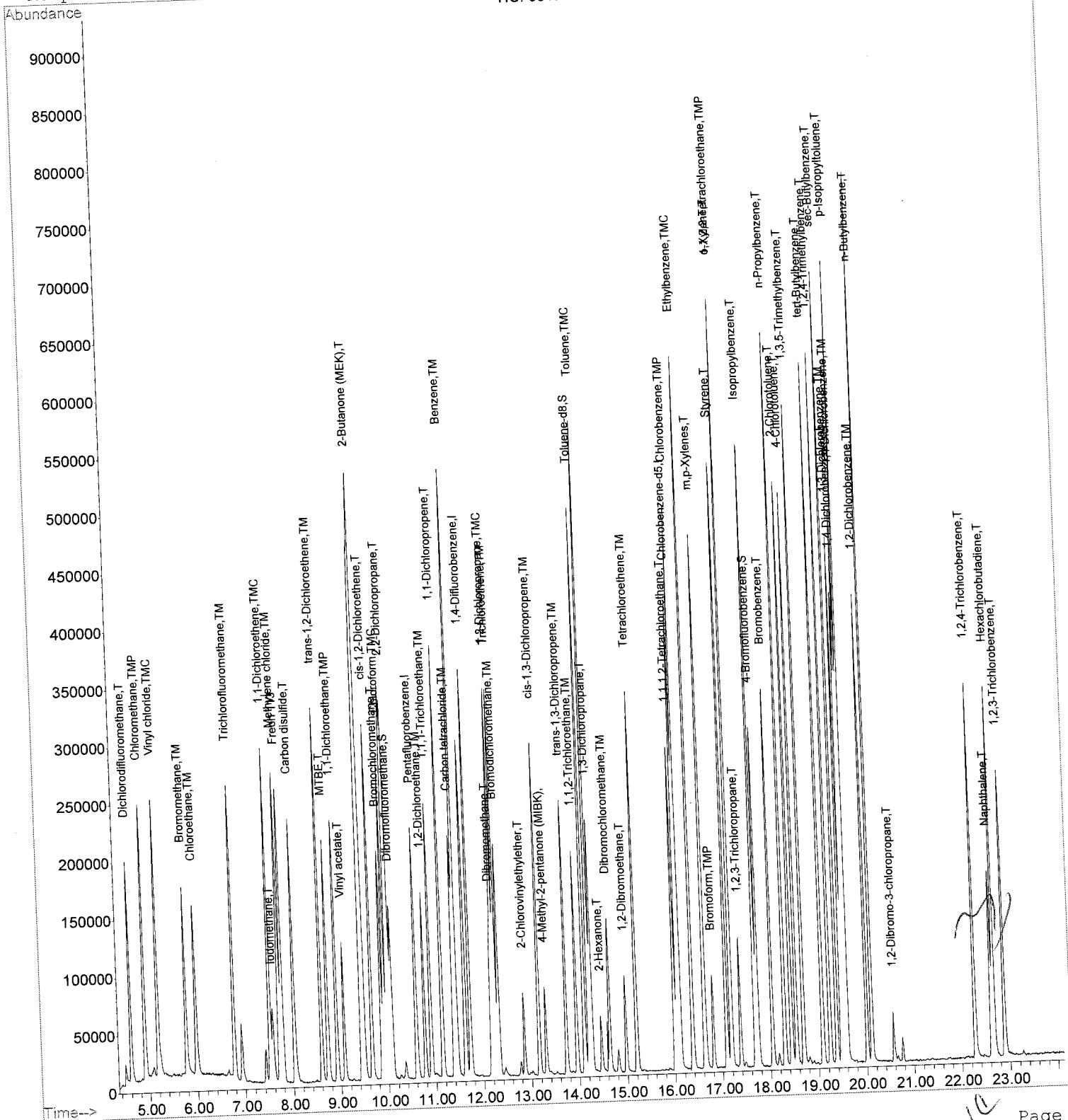
Page 2

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171103.D



## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	208596	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	368454	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	303623	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	134043	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	111829	22.51	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.04%		
39) Toluene-d8	14.11	98	400008	22.77	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.08%		
53) 4-Bromofluorobenzene	17.75	95	136919	22.36	ug/L	0.00
Spiked Amount 25.000			Recovery =	89.44%		
Target Compounds				Qvalue		
8) Acetone	6.94	46	4324	1.42	ug/L	# 65
10) 1,1-Dichloroethene	7.51	56	60	Below Cal	#	73
13) Carbon disulfide	8.03	76	742	Below Cal		100
24) 1,2-Dichloroethane	10.60	62	1046	0.16	ug/L	# 1
36) 4-Methyl-2-pentanone (MIBK)	13.01	43	7775	1.98	ug/L	# 50
38) 1,1,2-Trichloroethane	14.12	83	373	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.11	76	4467	0.64	ug/L	# 68
73) 1,2,4-Trichlorobenzene	22.29	180	1153	0.20	ug/L	97
74) Naphthalene	22.63	128	8429	1.13	ug/L	100
76) 1,2,3-Trichlorobenzene	22.91	180	1057	0.22	ug/L	93

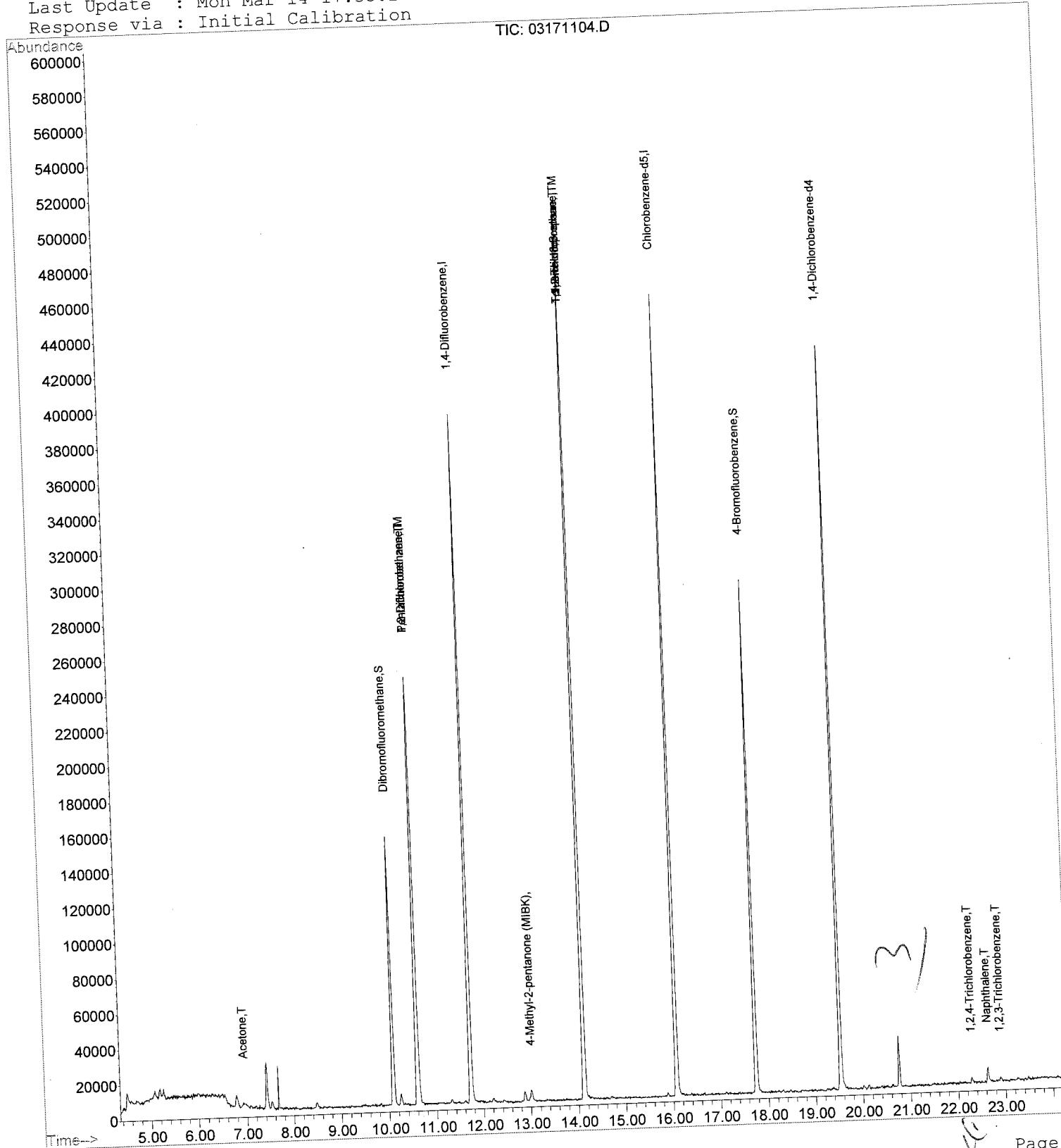
(#) = qualifier out of range (m) = manual integration  
 03171104.D 031411.RES Thu Mar 17 13:54:37 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171104.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	110687	24.00	ug/L	0.00
Spiked Amount 25.000			Recovery =	96.00%		
39) Toluene-d8	14.11	98	374753	22.97	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.88%		
53) 4-Bromofluorobenzene	17.75	95	131653	22.85	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.40%		
Target Compounds				Ovalue		
3) Chloromethane	4.89	50	1791	0.14	ug/L	1/2L 98
8) Acetone	6.93	43	3328	0.96	ug/L	# 69
10) 1,1-Dichloroethene	7.53	96	127	Below Cal	# 1	
13) Carbon disulfide	8.02	76	5282	Below Cal	100	
17) Vinyl acetate	9.19	43	944	0.10	ug/L	# 82
24) 1,2-Dichloroethane	10.60	62	1206	0.20	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11	ug/L	# 100T 70
42) 1,3-Dichloropropane	14.12	76	3863	0.60	ug/L	# 100L 32
43) 2-Hexanone	14.46	43	235	0.11	ug/L	# 100L 32
74) Naphthalene	22.63	128	1667	0.23	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171105.D 031411.M Thu Mar 17 13:54:55 2011

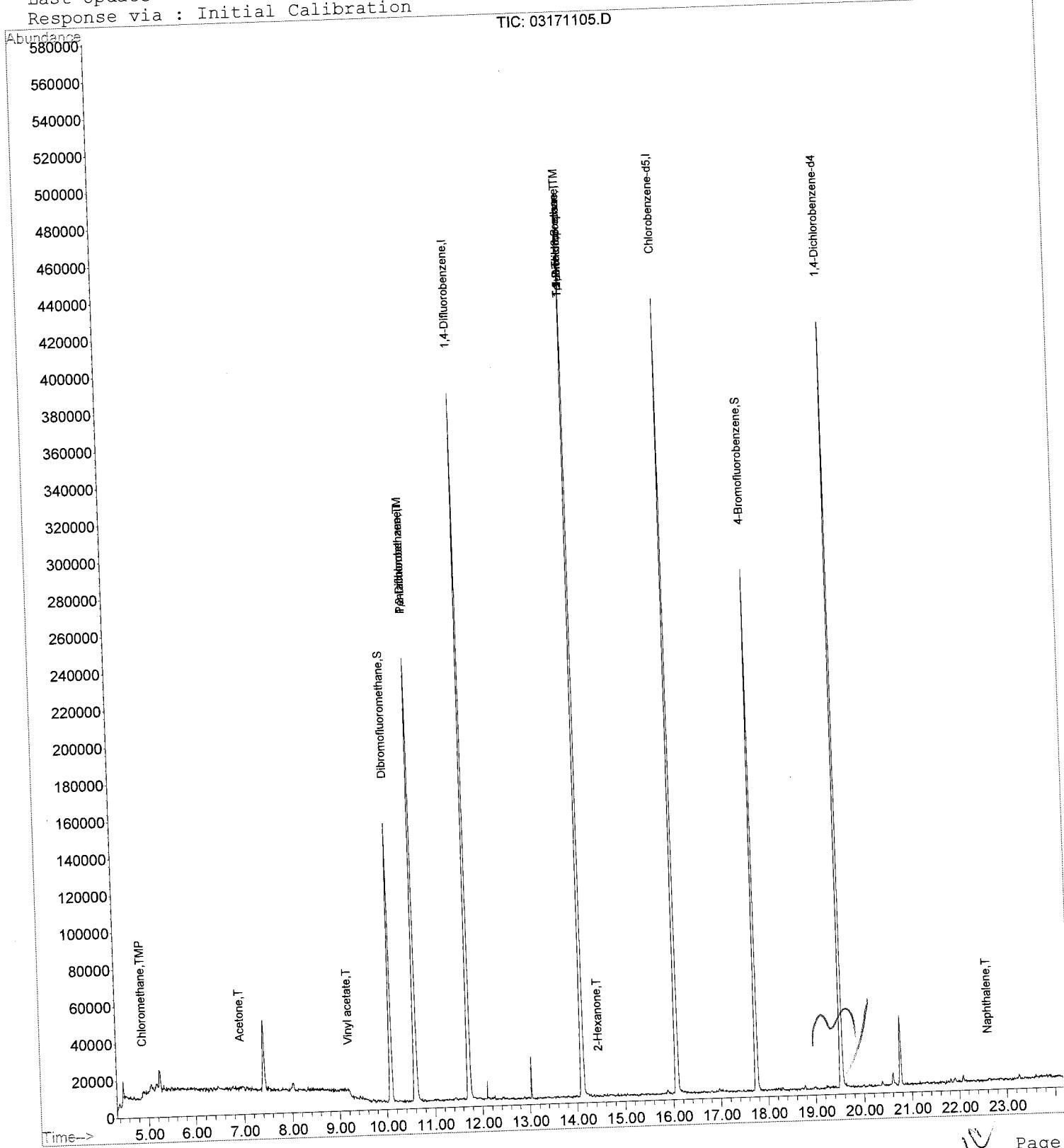
3/18/11

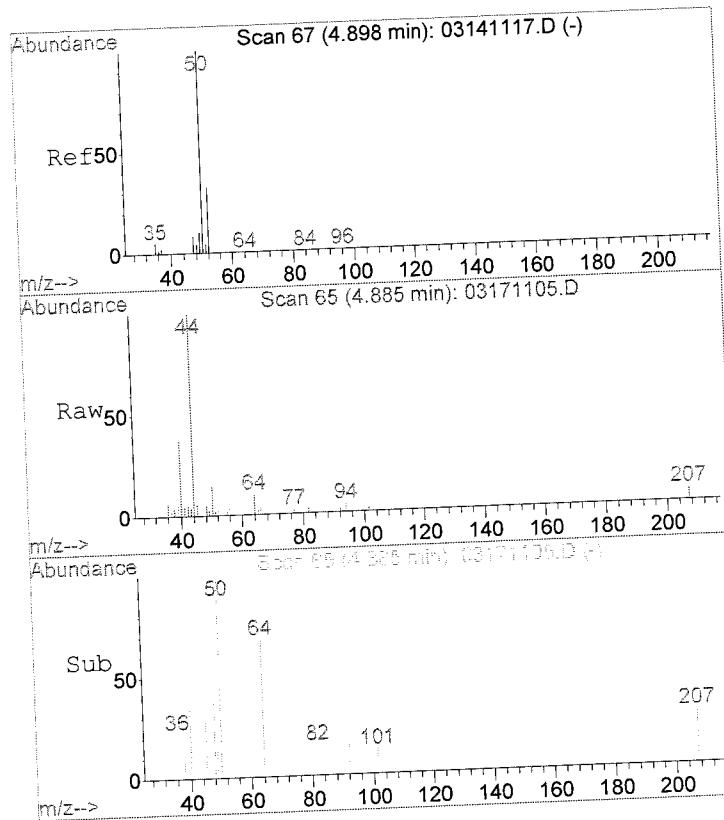
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

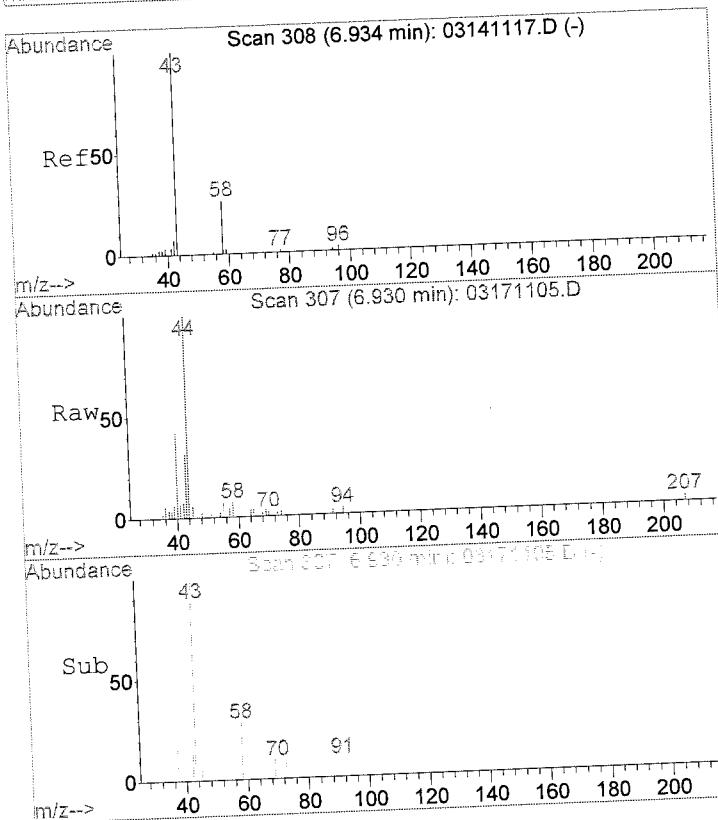
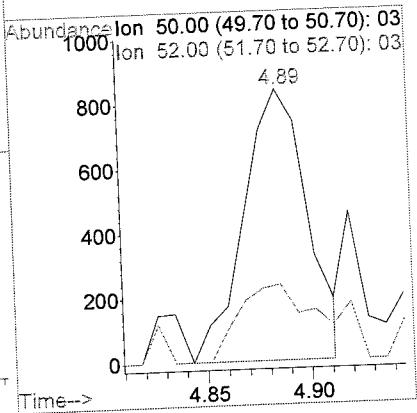
TIC: 03171105.D





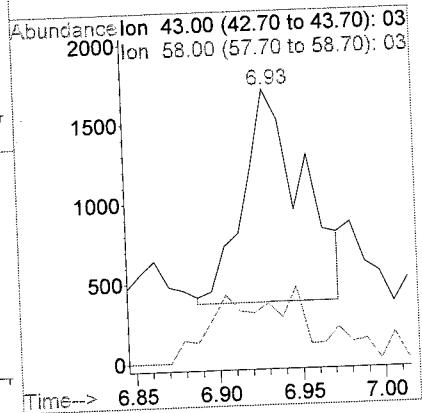
#3  
Chloromethane  
Concen: 0.14 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

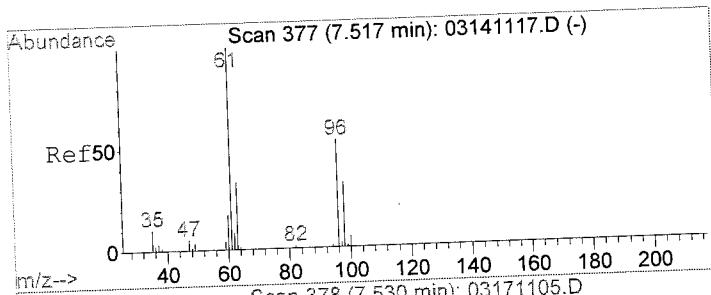
Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.4 38.2



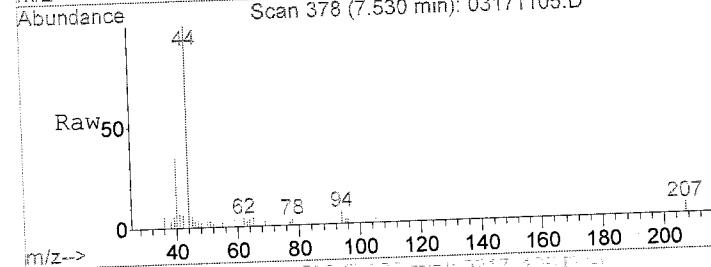
#8  
Acetone  
Concen: 0.96 ug/L  
RT: 6.93 min Scan# 307  
Delta R.T. -0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 20.4 30.6#

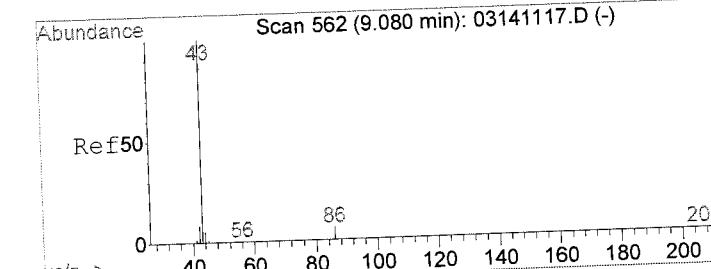
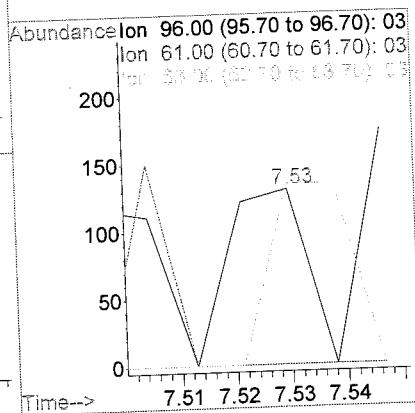
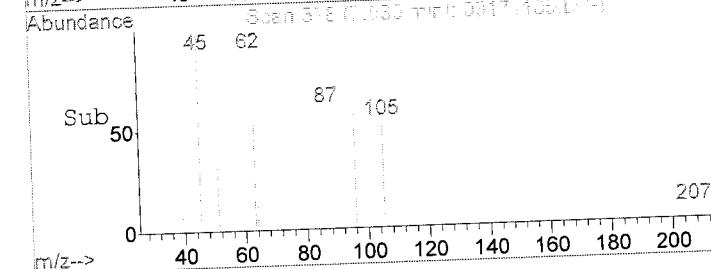




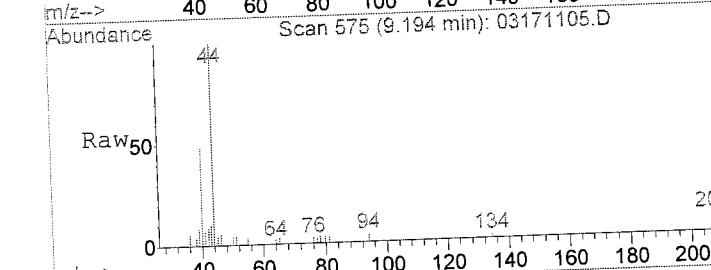
#10  
1,1-Dichloroethene  
Concen: Below Cal  
RT: 7.53 min Scan# 378  
Delta R.T. 0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am



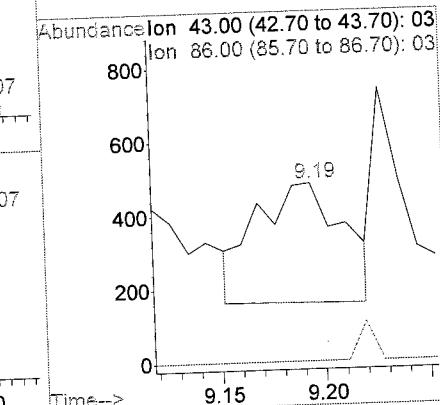
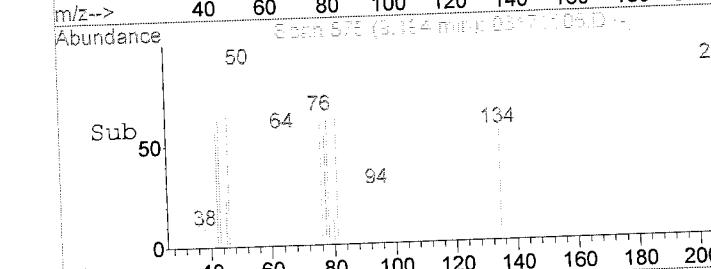
Tgt Ion: 96 Resp: 127  
Ion Ratio Lower Upper  
96 100  
61 0.0 164.0 246.0#  
63 107.1 51.4 77.0#

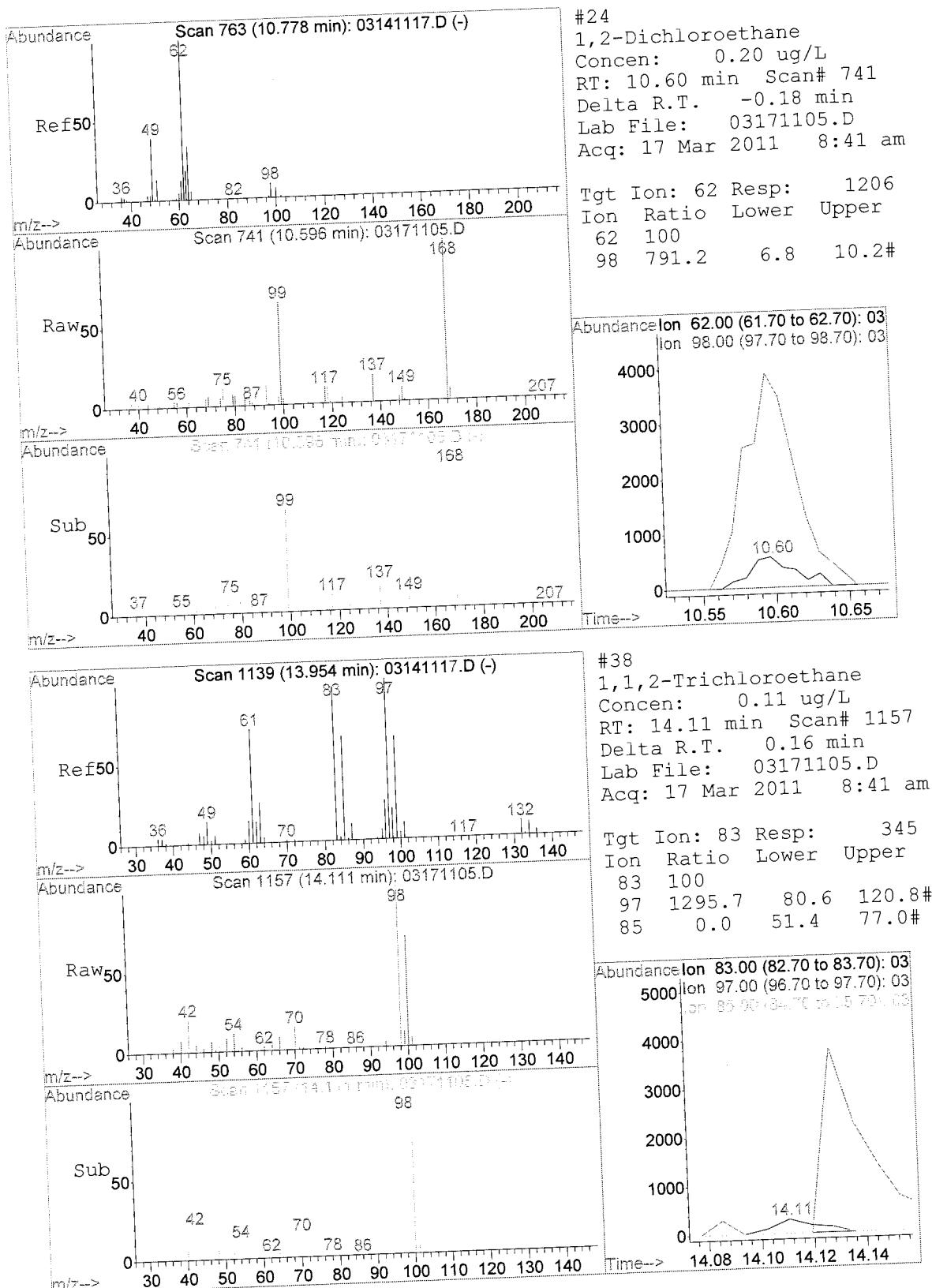


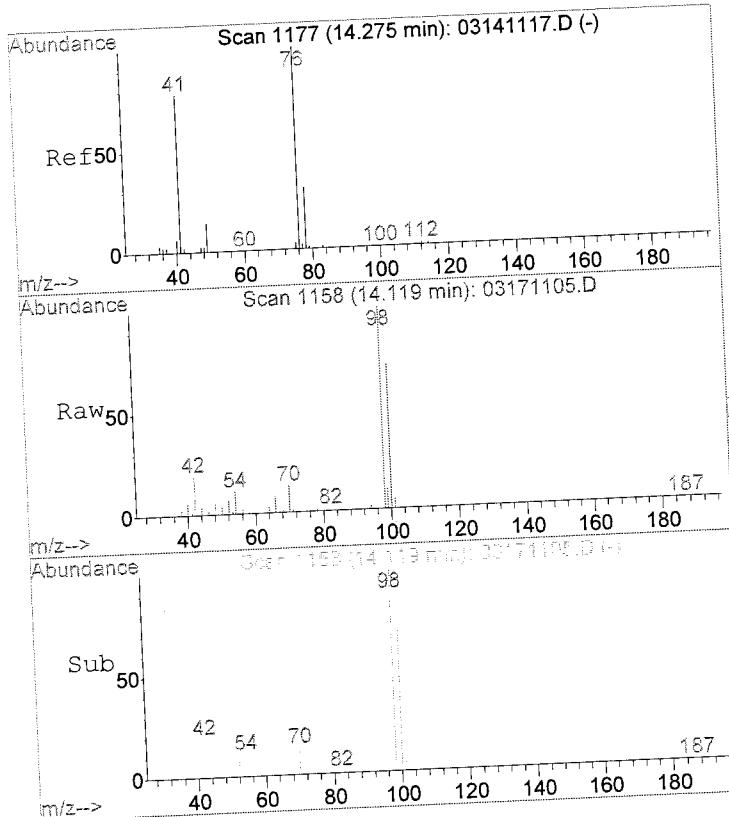
#17  
Vinyl acetate  
Concen: 0.10 ug/L  
RT: 9.19 min Scan# 575  
Delta R.T. 0.11 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am



Tgt Ion: 43 Resp: 944  
Ion Ratio Lower Upper  
43 100  
86 0.0 4.7 7.1#

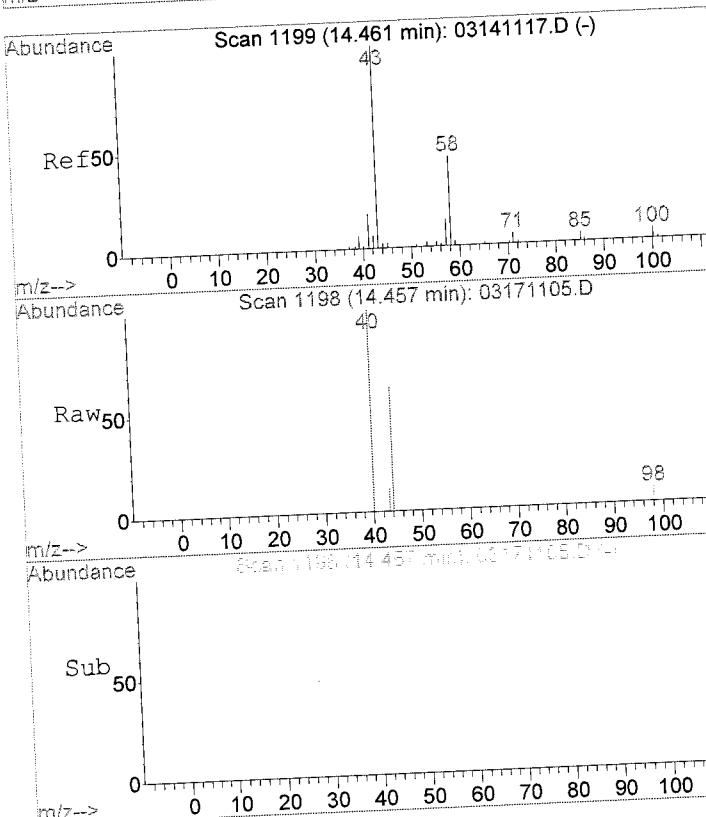
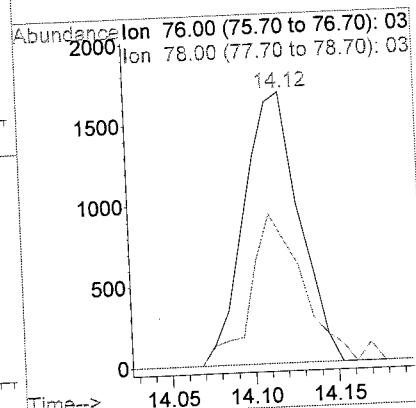






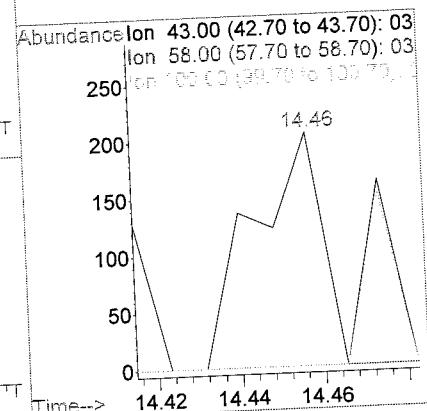
#42  
1,3-Dichloropropane  
Concen: 0.60 ug/L  
RT: 14.12 min Scan# 1158  
Delta R.T. -0.16 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

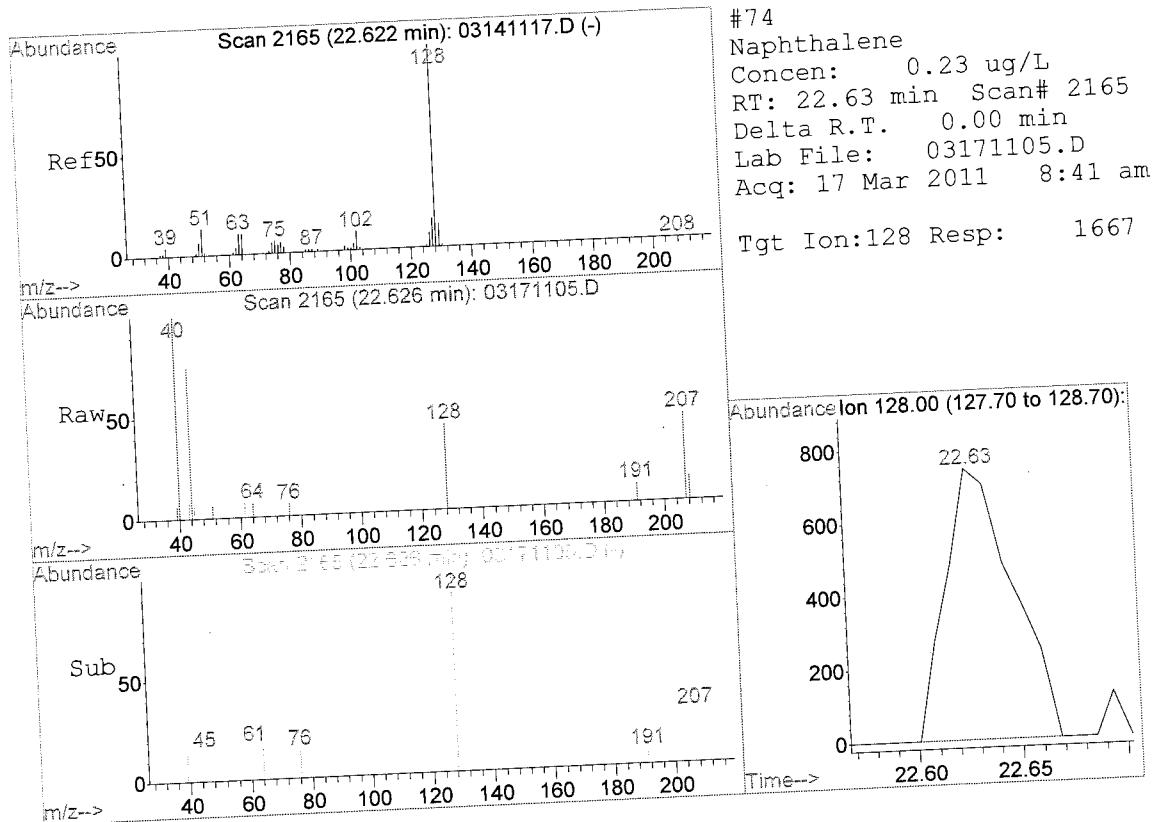
Tgt Ion: 76 Resp: 3863  
Ion Ratio Lower Upper  
76 100  
78 48.4 25.5 38.3#



#43  
2-Hexanone  
Concen: 0.11 ug/L  
RT: 14.46 min Scan# 1198  
Delta R.T. -0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 43 Resp: 235  
Ion Ratio Lower Upper  
43 100  
58 0.0 34.8 52.2#  
100 0.0 0.0 0.0

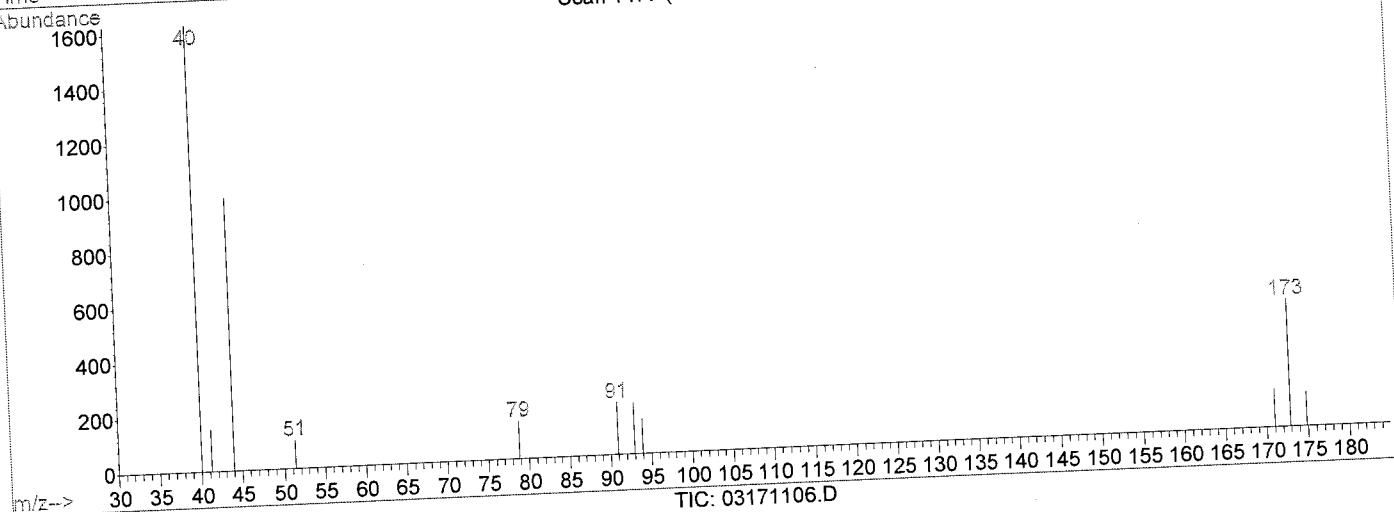
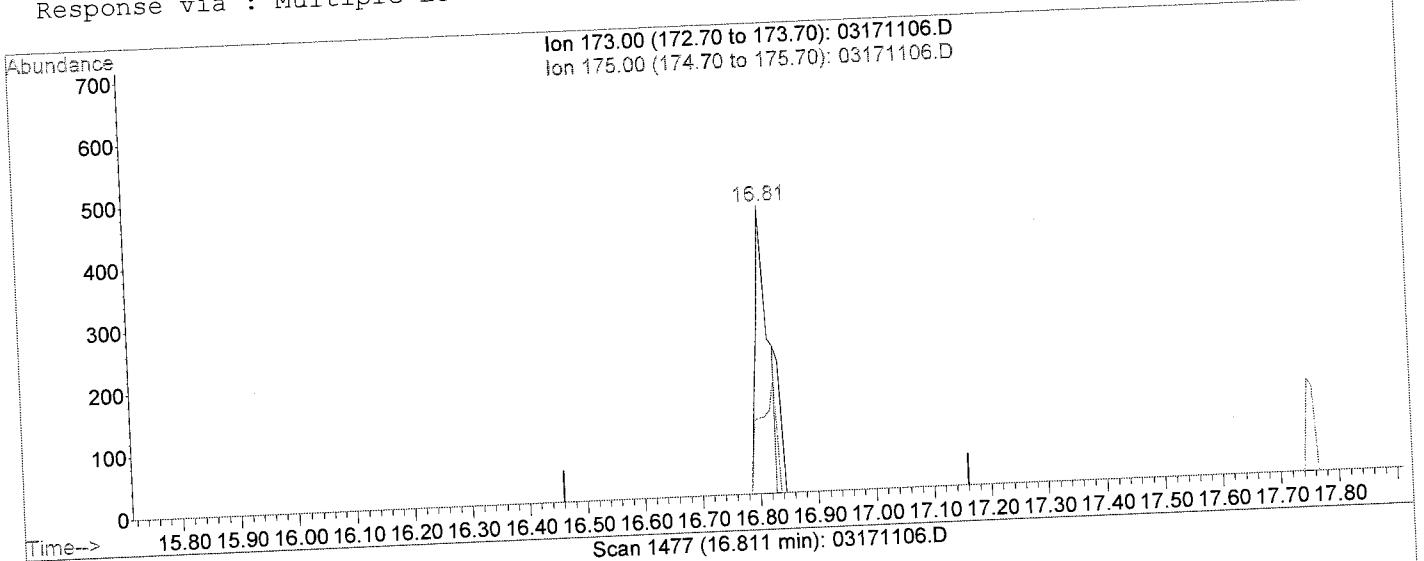




Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:55 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP)

16.81min 0.42ug/L

response 696

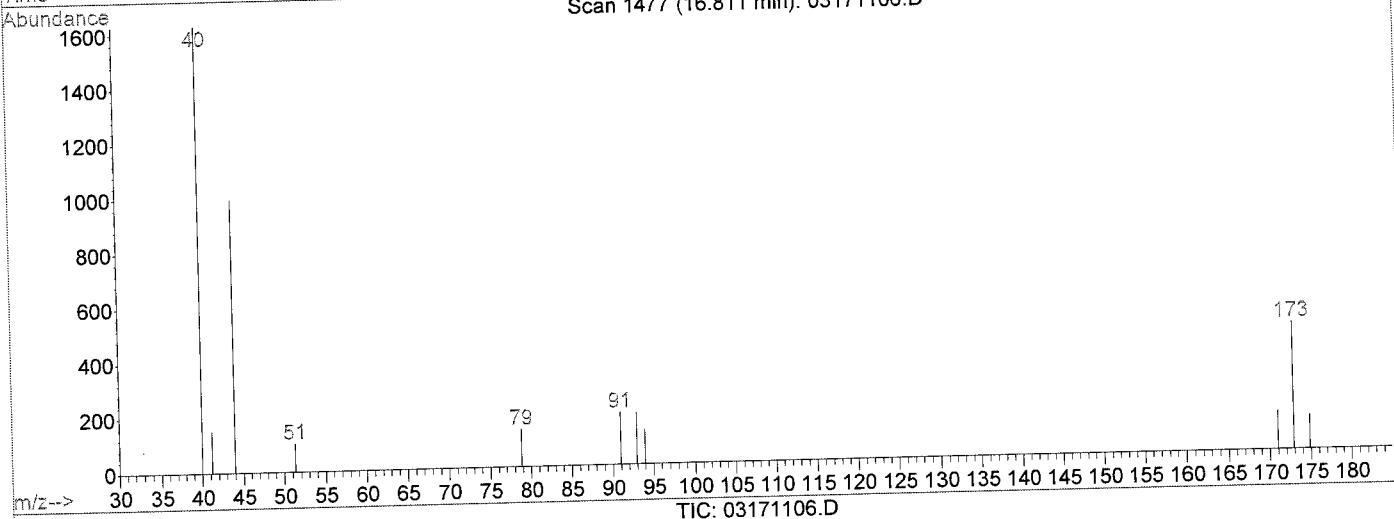
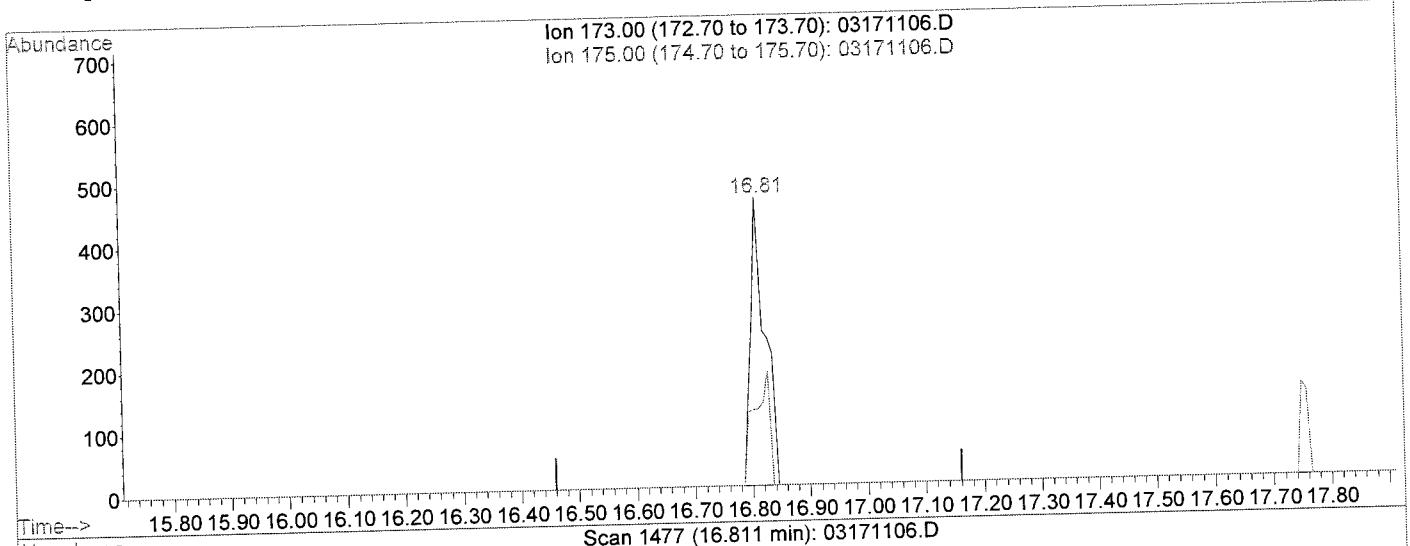
Ion	Exp%	Act%
173.00	100	100
175.00	50.90	23.13#
0.00	0.00	0.00
0.00	0.00	0.00

Before - SP

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.49ug/L m

response 803

Ion	Exp%	Act%
173.00	100	100
175.00	50.90	20.05#
0.00	0.00	0.00
0.00	0.00	0.00

After

W  
V  
C 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:56 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	2490	0.62	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.48%		
39) Toluene-d8	14.12	98	8971	0.63	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.52%		
53) 4-Bromofluorobenzene	17.76	95	3244	0.65	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.60%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	4286	0.53	ug/L	92
3) Chloromethane	4.89	50	6587	0.58	ug/L	96
4) Vinyl chloride	5.18	62	6003	0.54	ug/L	90
5) Bromomethane	5.78	94	3084	0.62	ug/L	90
6) Chloroethane	5.97	64	3371	0.56	ug/L	# 75
7) Trichlorofluoromethane	6.77	101	4364	0.52	ug/L	93
8) Acetone	0.00	43	0	N.D.	d	
9) Iodomethane	7.58	142	1272	0.33	ug/L	95
10) 1,1-Dichloroethene	7.50	96	2883	0.40	ug/L	91
11) Methylene chloride	7.70	84	3890	0.70	ug/L	95
12) Freon 113	7.77	101	3509	0.65	ug/L	93
13) Carbon disulfide	8.02	76	10027	0.34	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 91
15) MTBE	8.73	73	5033	0.57	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.56	ug/L	97
17) Vinyl acetate	9.08	43	4816	0.58	ug/L	# 82
18) 2-Butanone (MEK)	9.46	72	199	0.70	ug/L	# 33
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	89
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 90
21) Chloroform	9.93	83	4941	0.56	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.52	ug/L	98
24) 1,2-Dichloroethane	10.77	62	2927	0.56	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.50	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	96
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.55	ug/L	100
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 86
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	99
32) Trichloroethene	12.27	95	2709	0.53	ug/L	97
33) Bromodichloromethane	12.33	83	3018	0.51	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	0.56	ug/L	# 56
35) cis-1,3-Dichloropropene	13.18	75	3500	0.49	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	0.00	43	0	N.D.	d	
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.50	ug/L	# 82
40) Toluene	14.21	92	6374	0.56	ug/L	98
42) 1,3-Dichloropropene	14.28	76	2607	0.47	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031411.M Thu Mar 17 13:56:36 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:56 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	0.00	43	0	N.D.	d	
44) Dibromochloromethane	14.65	129	2052	0.64	ug/L	84
45) 1,2-Dibromoethane	14.98	107	1293	0.48	ug/L	#
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.59	ug/L	#
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.56	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.60	ug/L	94
51) Styrene	17.10	104	5086	0.44	ug/L	#
52) o-Xylene	17.20	106	4214	0.58	ug/L	99
55) Bromoform	16.81	173	803m	0.49	ug/L	
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	#
57) 1,2,3-Trichloropropane	17.38	110	276	0.38	ug/L	#
58) Isopropylbenzene	17.70	105	9284	0.51	ug/L	98
59) Bromobenzene	18.05	156	1904	0.47	ug/L	85
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	96
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.52	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.50	ug/L	97
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.51	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	#
69) p-Isopropyltoluene	19.61	119	8395	0.48	ug/L	87
70) 1,2-Dichlorobenzene	20.02	146	3885	0.55	ug/L	94
71) n-Butylbenzene	20.11	91	9466	0.49	ug/L	97
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	d	
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.42	ug/L	81
74) Naphthalene	22.63	128	4307	0.67	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	Below Cal	#	66
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.46	ug/L	87

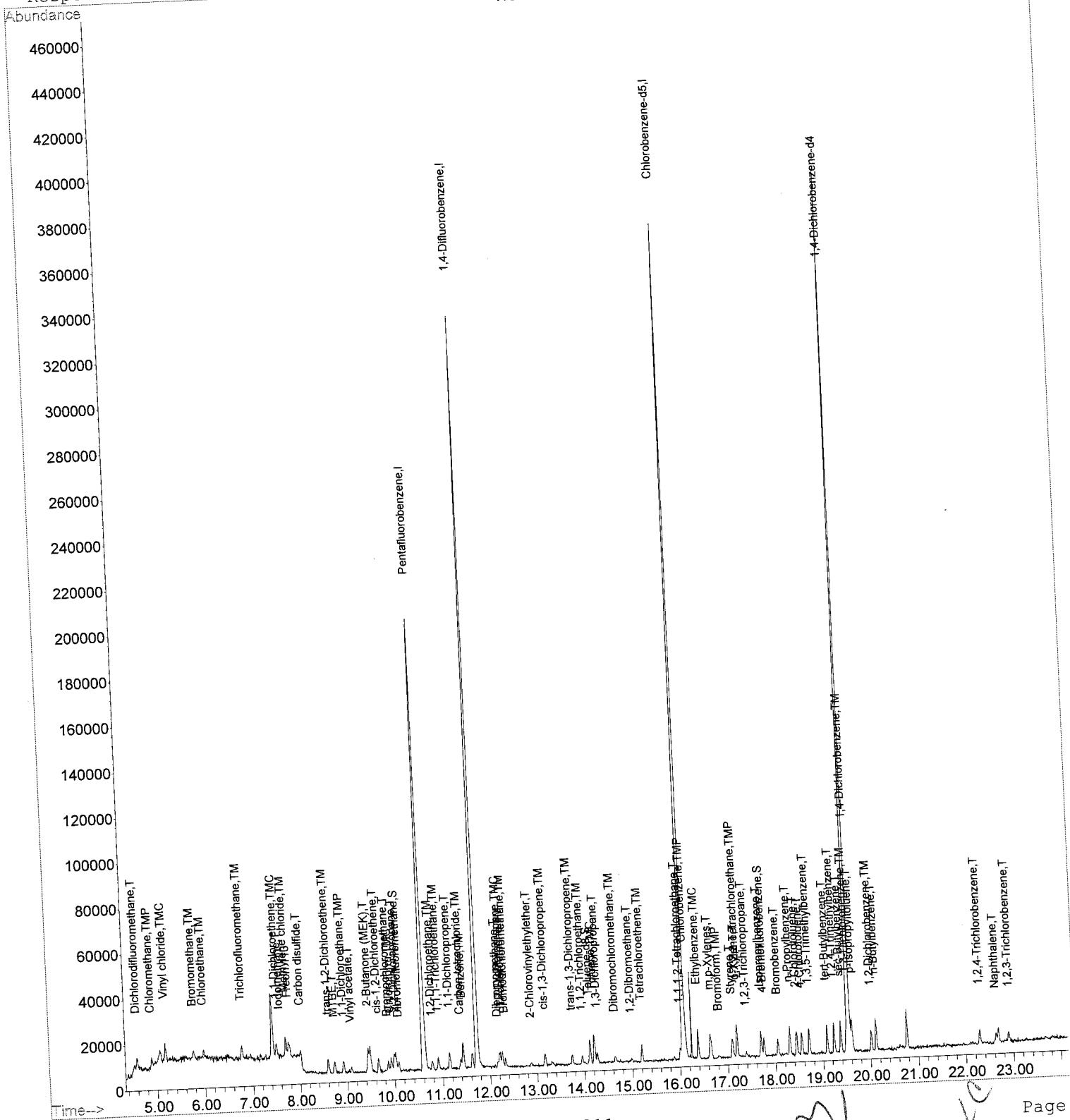
(#) = qualifier out of range (m) = manual integration  
 03171106.D 031411.M Thu Mar 17 13:56:37 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
Acq On : 17 Mar 2011 9:12 am Operator: LC  
Sample : 0.5 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS\METHODS\031411.M  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171106.D



03171106.D 031411.M

Thu Mar 17 13:56:37 2011

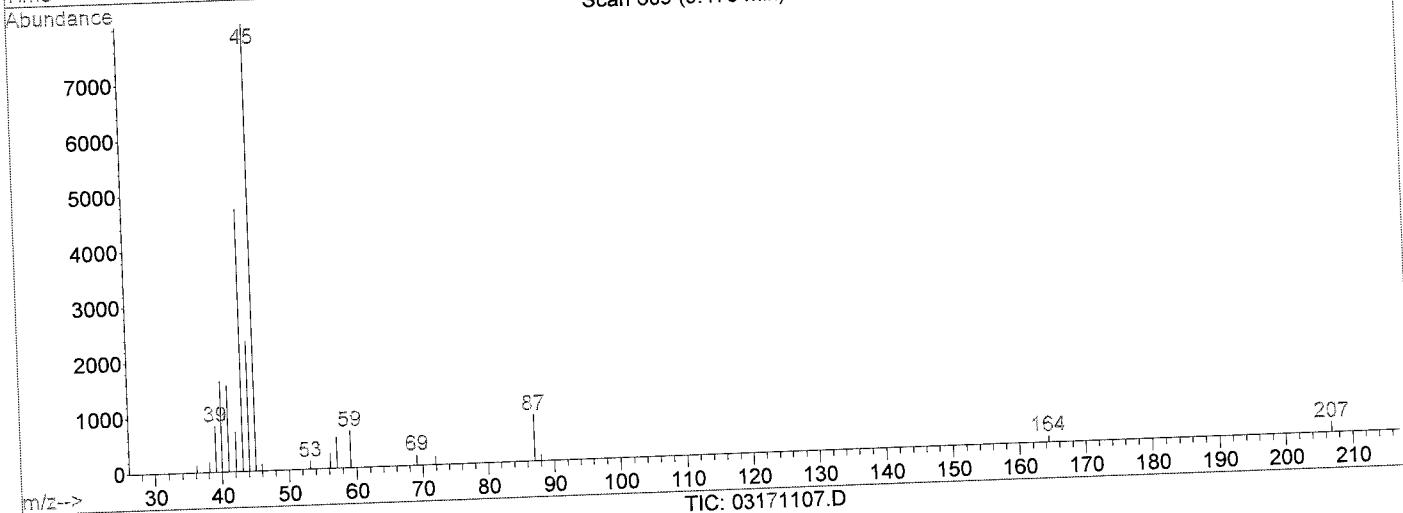
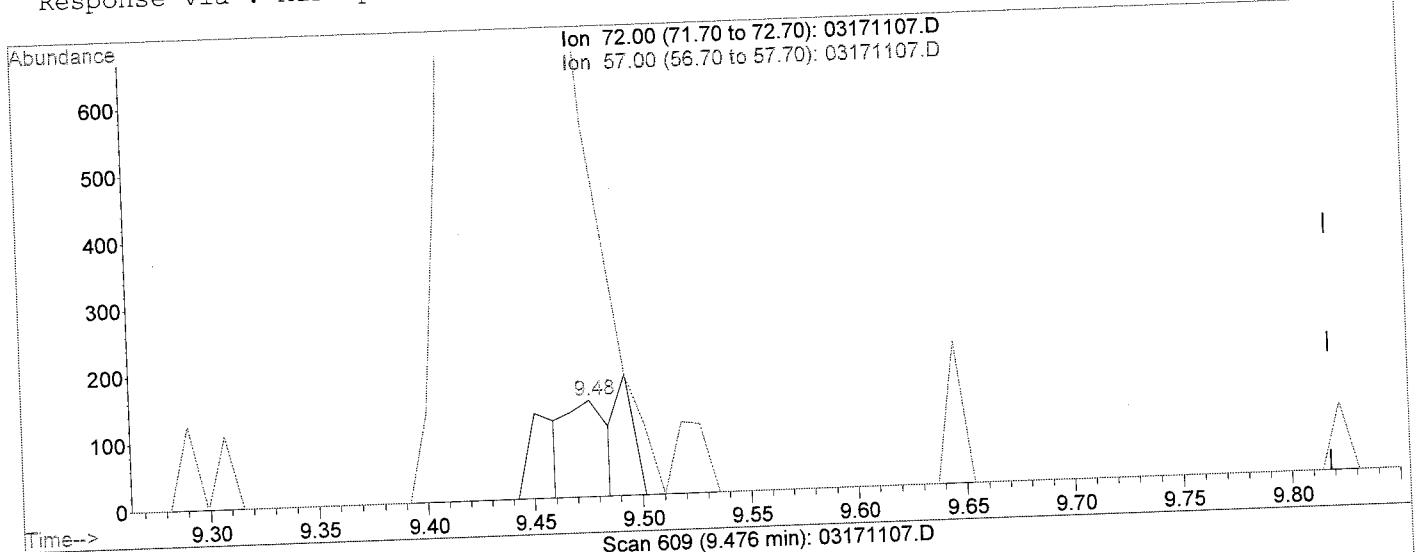
59 of 285

Page

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.48min 0.69ug/L

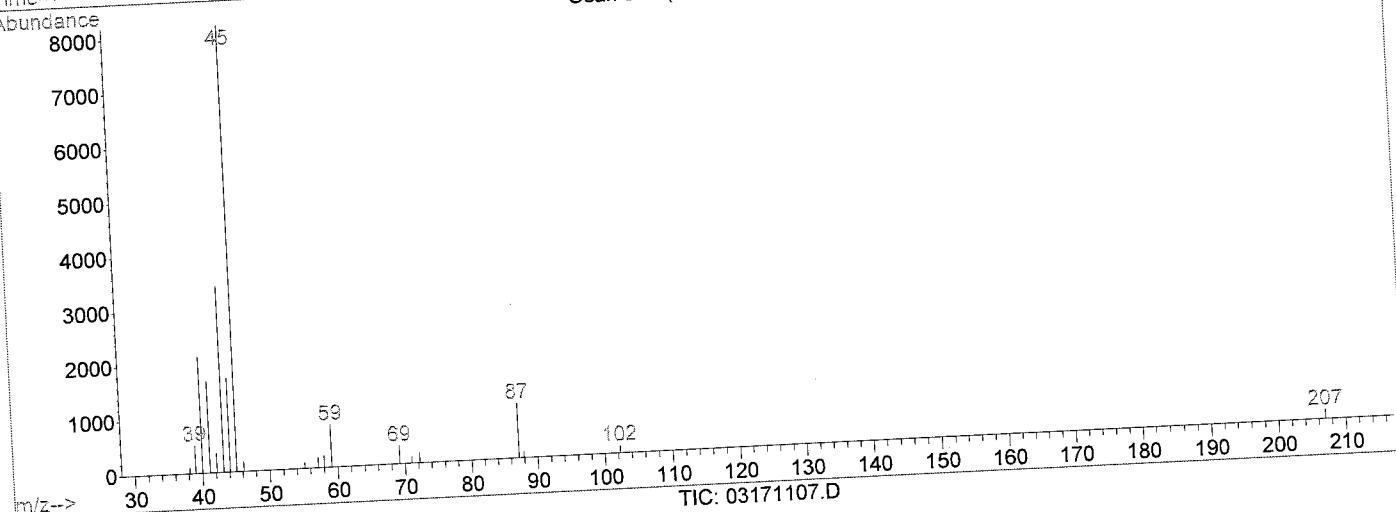
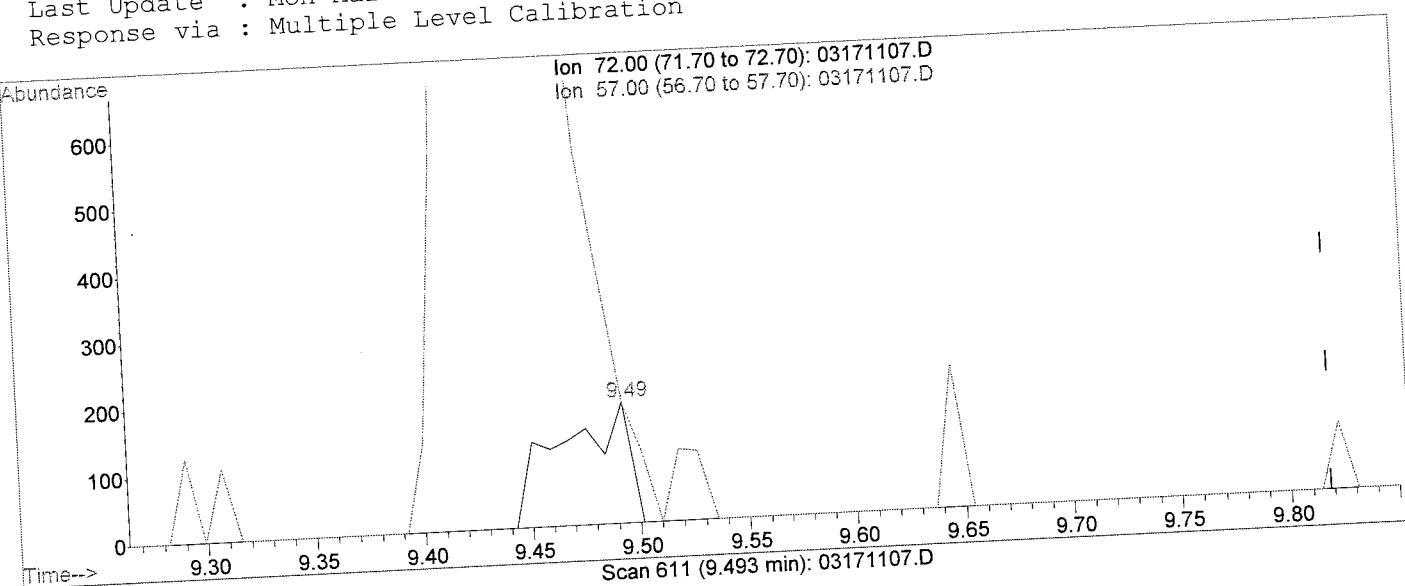
response 190

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Before - NIP

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:57 2011  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.49min 1.46ug/L m

response 405

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

After

Ver 03/18/11

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:57 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	3898	1.00	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.00%		
39) Toluene-d8	14.12	98	14880	1.07	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.28%		
53) 4-Bromofluorobenzene	17.76	95	5477	1.10	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.40%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.58	85	7417	0.94	ug/L	95
3) Chloromethane	4.89	50	11297	1.01	ug/L	99
4) Vinyl chloride	5.18	62	11731	1.07	ug/L #	84
5) Bromomethane	5.77	94	5200	1.07	ug/L	90
6) Chloroethane	5.98	64	6815	1.17	ug/L	90
7) Trichlorofluoromethane	6.77	101	8152	1.00	ug/L	92
8) Acetone	0.00	43	0	N.D.	d	
9) Iodomethane	7.57	142	3864	1.02	ug/L #	83
10) 1,1-Dichloroethene	7.51	96	5486	1.05	ug/L	95
11) Methylene chloride	7.70	84	6767	1.24	ug/L	93
12) Freon 113	7.78	101	6284	1.18	ug/L	96
13) Carbon disulfide	8.02	76	17829	0.89	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.20	ug/L	83
15) MTBE	8.73	73	10605	1.24	ug/L #	88
16) 1,1-Dichloroethane	8.92	63	12255	1.17	ug/L #	97
17) Vinyl acetate	9.09	43	9903	1.23	ug/L #	92
18) 2-Butanone (MEK)	9.49	72	405m	1.46	ug/L	
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L	96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L	96
21) Chloroform	9.93	83	8465	0.98	ug/L	99
22) 2,2-Dichloropropane	10.03	77	6968	0.97	ug/L	92
24) 1,2-Dichloroethane	10.78	62	5936	1.16	ug/L #	76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.95	ug/L	95
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L #	94
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L	98
29) Benzene	11.44	78	20409	1.03	ug/L	98
30) Dibromomethane	12.17	93	2529	1.07	ug/L	96
31) 1,2-Dichloropropane	12.21	63	5383	0.97	ug/L #	88
32) Trichloroethene	12.26	95	4847	0.97	ug/L	95
33) Bromodichloromethane	12.32	83	5644	0.97	ug/L	87
34) 2-Chlorovinylethylether	12.86	63	1739	1.28	ug/L #	82
35) cis-1,3-Dichloropropene	13.18	75	6952	0.99	ug/L	94
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.11	ug/L #	89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.97	ug/L #	82
40) Toluene	14.22	92	10459	0.94	ug/L	91
42) 1,3-Dichloropropane	14.27	76	5543	0.99	ug/L #	73

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:57 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.31	ug/L #	77
44) Dibromochloromethane	14.65	129	2863	0.89	ug/L	98
45) 1,2-Dibromoethane	14.98	107	2446	0.90	ug/L #	78
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	93
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.03	ug/L #	58
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	92
49) Ethylbenzene	16.38	91	20598	0.97	ug/L	99
50) m,p-Xylenes	16.64	106	6910	0.93	ug/L	92
51) Styrene	17.10	104	10355	0.90	ug/L	90
52) o-Xylene	17.20	106	7210	1.00	ug/L	90
55) Bromoform	16.81	173	1545	0.97	ug/L #	72
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L #	89
57) 1,2,3-Trichloropropane	17.38	110	807	1.14	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.92	ug/L	100
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.96	ug/L	99
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.94	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.95	ug/L	97
66) sec-Butylbenzene	19.38	105	21187	0.96	ug/L	93
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	98
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	98
69) p-Isopropyltoluene	19.61	119	15312	0.90	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.96	ug/L	96
71) n-Butylbenzene	20.11	91	17346	0.92	ug/L	89
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.90	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	4683	0.95	ug/L	100
74) Naphthalene	22.63	128	5978	0.95	ug/L	90
75) Hexachlorobutadiene	22.68	225	2850	0.43	ug/L	94
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.84	ug/L	94

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

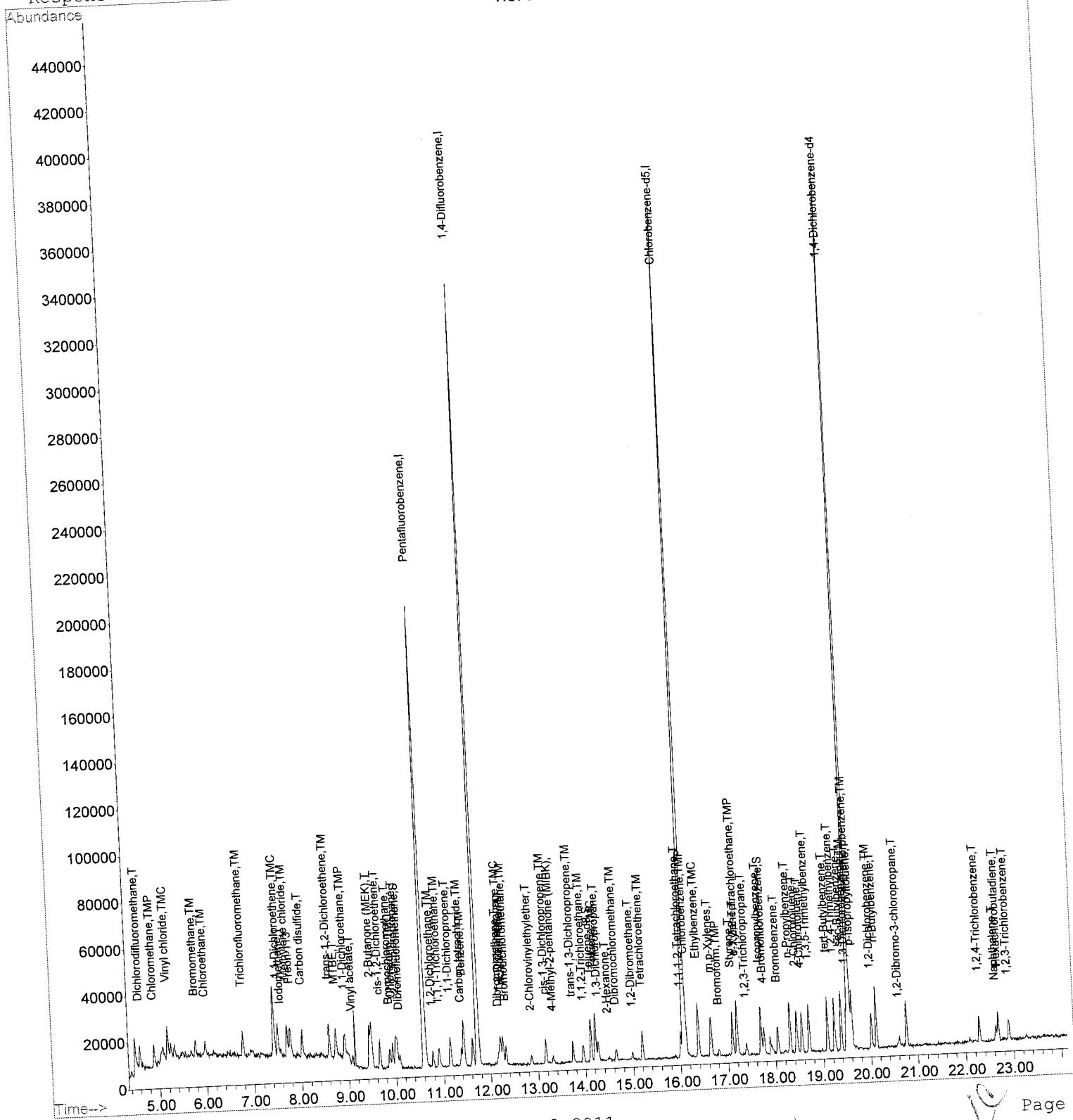
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## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 13:57 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (NRI)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171107.D



03171107.D 031411.M

Thu Mar 17 13:57:42 2011

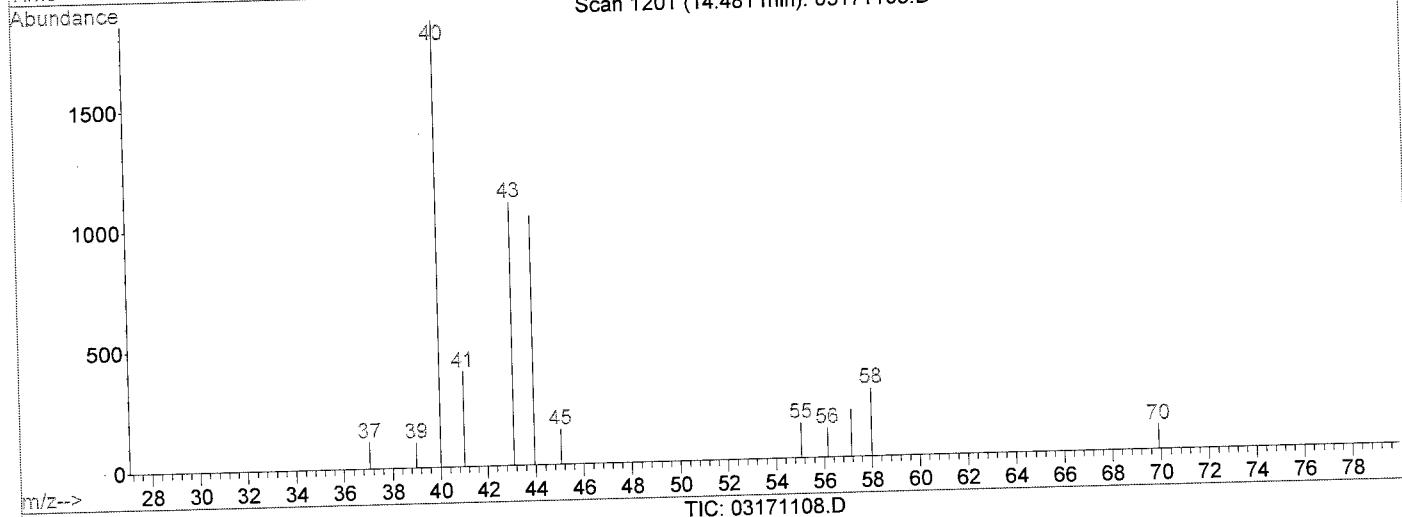
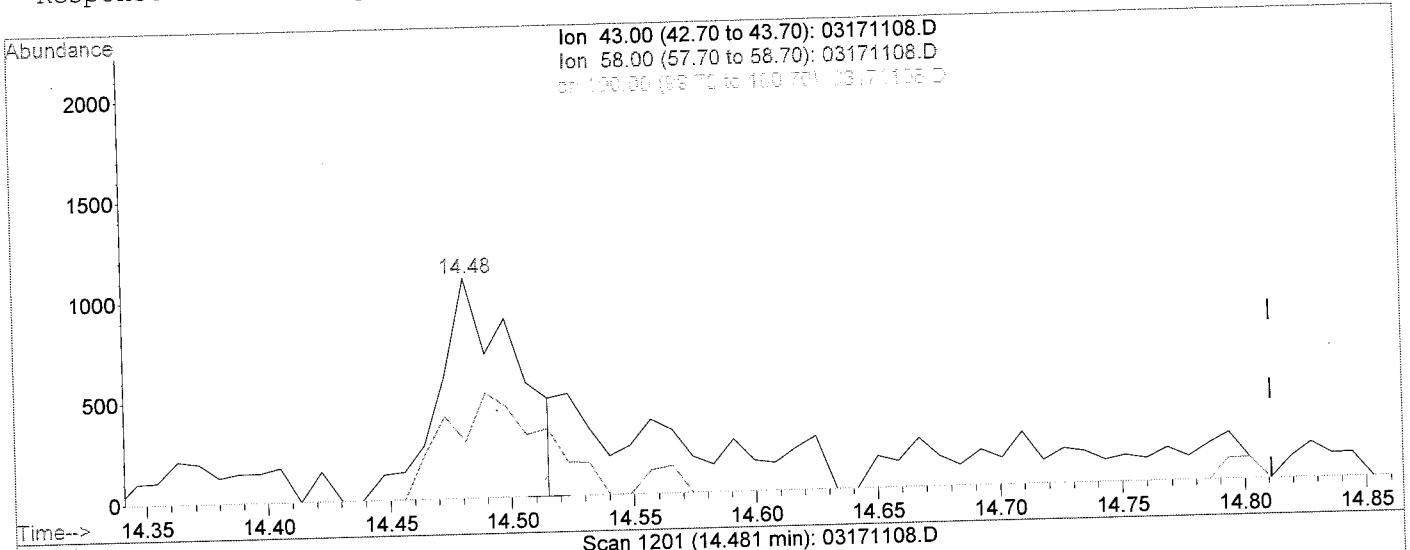
64 of 285

Page

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.28ug/L

response 2474

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	39.81
100.00	0.00	0.00
0.00	0.00	0.00

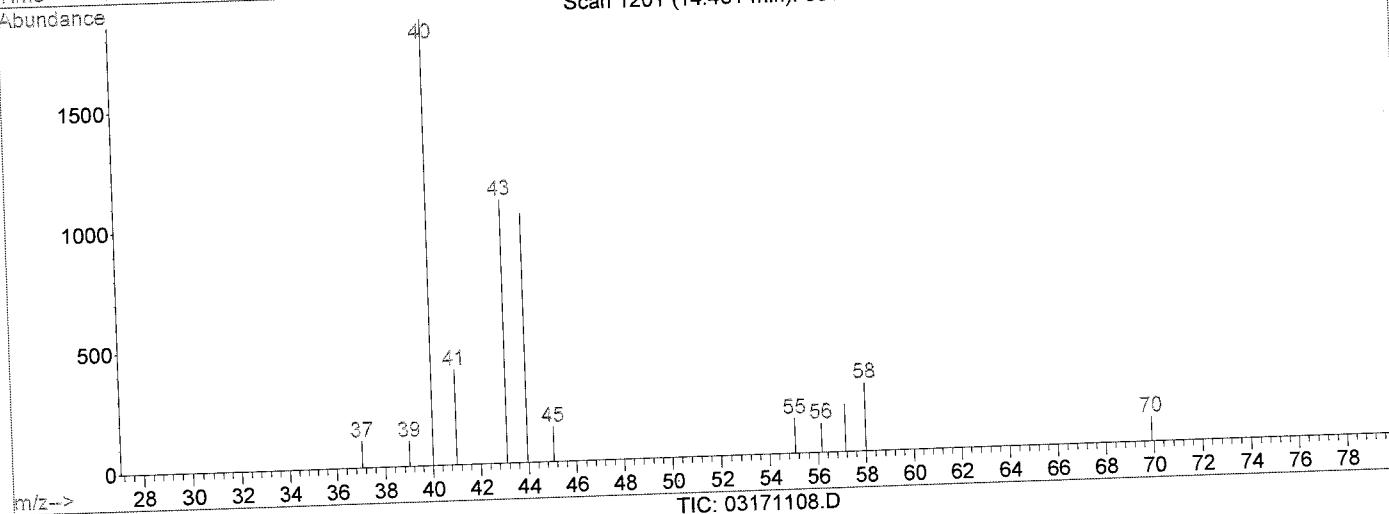
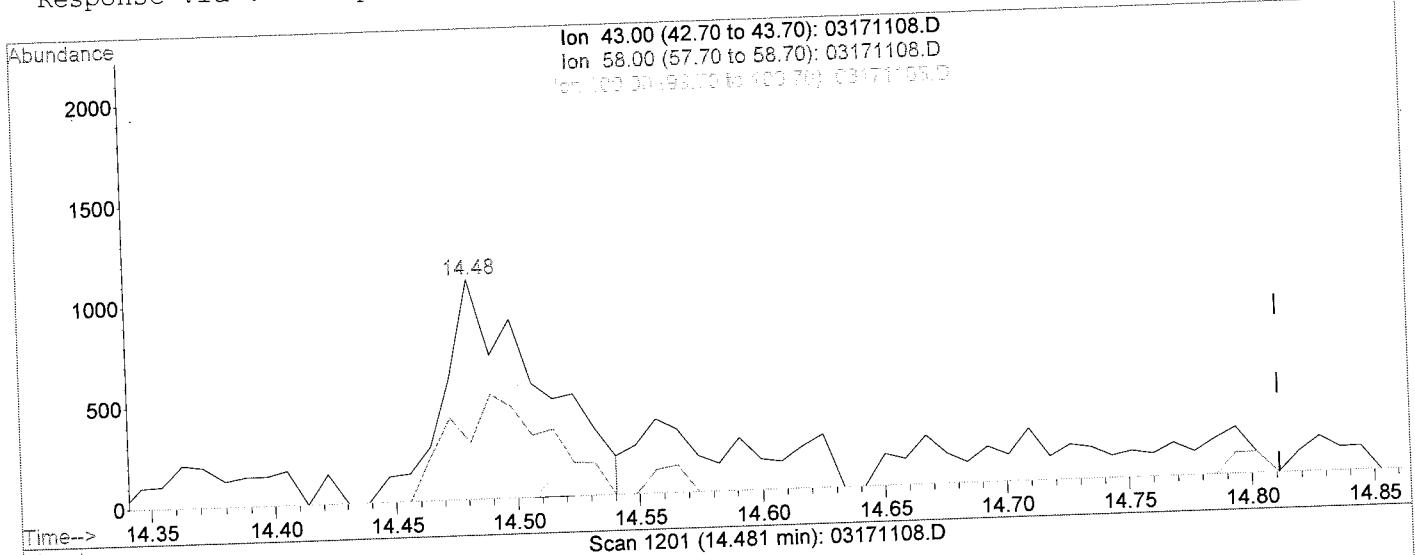
Before - NIP

~ S/N/HY 10/03/11

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:59 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.55ug/L m

response 2999

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	32.84#
100.00	0.00	0.00
0.00	0.00	0.00

After

M

✓ 03/18/11

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	7767	1.95	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.80%		
39) Toluene-d8	14.12	98	28802	2.04	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.16%		
53) 4-Bromofluorobenzene	17.75	95	10411	2.08	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.32%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	15723	1.95	ug/L	94
3) Chloromethane	4.89	50	22795	2.00	ug/L	97
4) Vinyl chloride	5.18	62	22297	2.00	ug/L	95
5) Bromomethane	5.77	94	6970	1.41	ug/L	95
6) Chloroethane	5.98	64	11754	1.97	ug/L #	85
7) Trichlorofluoromethane	6.78	101	16143	1.94	ug/L	100
8) Acetone	6.94	43	4997	2.62	ug/L	97
9) Iodomethane	7.57	142	5343	1.38	ug/L	96
10) 1,1-Dichloroethene	7.51	96	8308	1.69	ug/L	98
11) Methylene chloride	7.71	84	10726	1.93	ug/L	97
12) Freon 113	7.77	101	10221	1.89	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.70	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.85	ug/L	97
15) MTBE	8.73	73	16615	1.90	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.93	ug/L	99
17) Vinyl acetate	9.08	43	14566	1.77	ug/L #	95
18) 2-Butanone (MEK)	9.47	72	179	0.63	ug/L #	1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.03	ug/L	91
20) Bromochloromethane	9.88	128	3627	1.82	ug/L	89
21) Chloroform	9.93	83	18162	2.07	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.91	ug/L	96
24) 1,2-Dichloroethane	10.78	62	10721	2.06	ug/L #	94
25) 1,1,1-Trichloroethane	10.91	97	12034	1.83	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	99
28) Carbon tetrachloride	11.38	117	9830	1.86	ug/L	94
29) Benzene	11.44	78	39494	1.97	ug/L	99
30) Dibromomethane	12.17	93	4597	1.92	ug/L	90
31) 1,2-Dichloropropane	12.22	63	10960	1.95	ug/L #	94
32) Trichloroethene	12.27	95	9761	1.93	ug/L	94
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	96
34) 2-Chlorovinylethylether	12.87	63	2637	1.91	ug/L #	85
35) cis-1,3-Dichloropropene	13.16	75	13465	1.88	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.68	ug/L #	94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.85	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.91	ug/L	94
40) Toluene	14.21	92	22811	2.03	ug/L	97
42) 1,3-Dichloropropane	14.28	76	10418	1.86	ug/L	92

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031411.M Thu Mar 17 13:59:31 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2999m	1.55	ug/L	
44) Dibromochloromethane	14.65	129	6238	1.94	ug/L	97
45) 1,2-Dibromoethane	14.99	107	5443	1.99	ug/L #	100
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.94	ug/L	95
48) Chlorobenzene	16.12	112	21803	1.89	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.91	ug/L	99
50) m,p-Xylenes	16.64	106	14567	1.95	ug/L	99
51) Styrene	17.09	104	21955	1.91	ug/L	100
52) o-Xylene	17.19	106	14080	1.95	ug/L	98
55) Bromoform	16.81	173	2978	1.87	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	95
57) 1,2,3-Trichloropropane	17.40	110	1450	2.05	ug/L	99
58) Isopropylbenzene	17.69	105	34246	1.94	ug/L	98
59) Bromobenzene	18.05	156	7927	1.99	ug/L	99
60) n-Propylbenzene	18.30	91	47531	1.91	ug/L	99
61) 2-Chlorotoluene	18.44	91	27642	1.93	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	99
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.90	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.89	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.92	ug/L	96
66) sec-Butylbenzene	19.38	105	43119	1.97	ug/L	96
67) 1,3-Dichlorobenzene	19.48	146	16064	1.97	ug/L	96
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	97
69) p-Isopropyltoluene	19.61	119	32053	1.88	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	13744	1.99	ug/L	99
71) n-Butylbenzene	20.12	91	35106	1.86	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.24	ug/L #	75
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.70	ug/L	96
74) Naphthalene	22.63	128	10824	1.73	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.50	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.72	ug/L	94

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031411.M Thu Mar 17 13:59:31 2011

Page 2

Quantitation Report

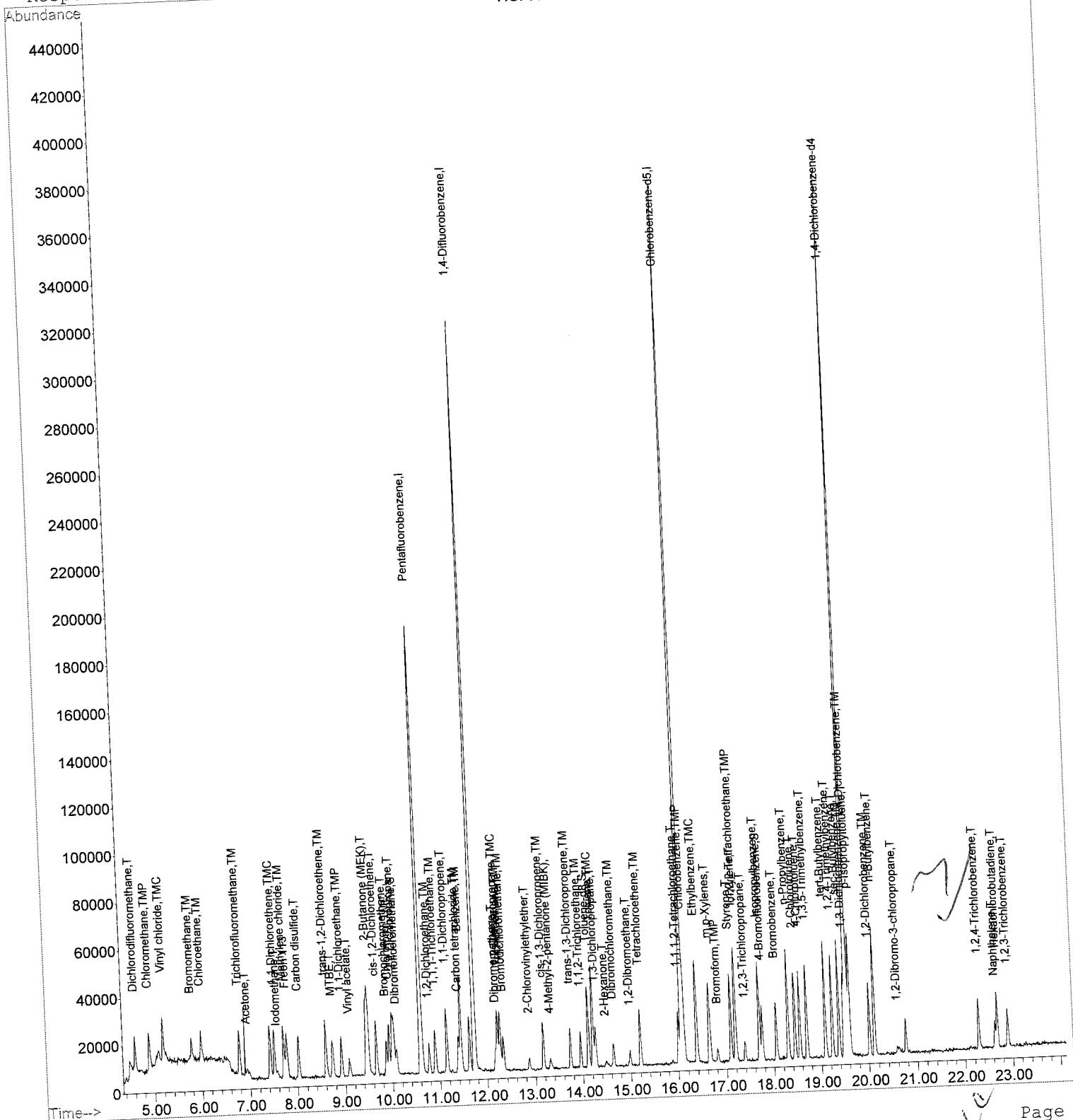
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 Acq On : 17 Mar 2011 10:14 am  
 Sample : 2.0 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011

Vial: 5  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171108.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	22772	5.84	ug/L	0.00
Spiked Amount 25.000			Recovery	=	23.36%	
39) Toluene-d8	14.12	98	75601	5.34	ug/L	0.00
Spiked Amount 25.000			Recovery	=	21.36%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.46	ug/L	0.00
Spiked Amount 25.000			Recovery	=	21.84%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	43993	5.56	ug/L	98
3) Chloromethane	4.90	50	69304	6.20	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.46	ug/L	97
5) Bromomethane	5.77	94	23286	4.82	ug/L	97
6) Chloroethane	5.98	64	31380	5.37	ug/L	97
7) Trichlorofluoromethane	6.78	101	44900	5.49	ug/L	98
8) Acetone	6.94	43	8551	5.67	ug/L	96
9) Iodomethane	7.57	142	19144	5.06	ug/L	100
10) 1,1-Dichloroethene	7.51	96	23635	5.45	ug/L	96
11) Methylene chloride	7.71	84	29505	5.41	ug/L	98
12) Freon 113	7.78	101	28220	5.32	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.39	ug/L	89
15) MTBE	8.74	73	47481	5.54	ug/L	98
16) 1,1-Dichloroethane	8.92	63	57409	5.51	ug/L	100
17) Vinyl acetate	9.09	43	45219	5.60	ug/L	97
18) 2-Butanone (MEK)	9.47	72	1224	4.43	ug/L #	38
19) cis-1,2-Dichloroethene	9.66	96	29437	5.59	ug/L	93
20) Bromochloromethane	9.87	128	11063	5.67	ug/L	98
21) Chloroform	9.93	83	49311	5.72	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.50	ug/L	98
24) 1,2-Dichloroethane	10.78	62	29254	5.73	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.44	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.37	ug/L	98
29) Benzene	11.44	78	106054	5.27	ug/L	99
30) Dibromomethane	12.17	93	12758	5.32	ug/L	96
31) 1,2-Dichloropropane	12.21	63	30926	5.49	ug/L	98
32) Trichloroethene	12.26	95	27719	5.47	ug/L	93
33) Bromodichloromethane	12.33	83	32710	5.51	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.30	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	39480	5.52	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	4.84	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.29	ug/L	99
40) Toluene	14.21	92	60380	5.37	ug/L	100
42) 1,3-Dichloropropane	14.27	76	31749	5.61	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031411.M Thu Mar 17 14:00:04 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.44	ug/L	# 92
44) Dibromochloromethane	14.64	129	17145	5.27	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.75	ug/L	# 97
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.20	ug/L	96
48) Chlorobenzene	16.12	112	60084	5.16	ug/L	100
49) Ethylbenzene	16.38	91	112334	5.23	ug/L	100
50) m,p-Xylenes	16.64	106	39718	5.25	ug/L	99
51) Styrene	17.09	104	62548	5.37	ug/L	99
52) o-Xylene	17.20	106	38050	5.20	ug/L	92
55) Bromoform	16.81	173	9209	5.63	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	86
57) 1,2,3-Trichloropropane	17.38	110	4203	5.79	ug/L	98
58) Isopropylbenzene	17.69	105	91339	5.05	ug/L	97
59) Bromobenzene	18.05	156	21568	5.28	ug/L	97
60) n-Propylbenzene	18.30	91	134531	5.26	ug/L	100
61) 2-Chlorotoluene	18.45	91	75803	5.15	ug/L	98
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.14	ug/L	97
64) tert-Butylbenzene	19.09	119	66536	5.03	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.03	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	42641	5.08	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.00	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	38242	5.39	ug/L	98
71) n-Butylbenzene	20.12	91	99714	5.16	ug/L	95
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.80	ug/L	99
73) 1,2,4-Trichlorobenzene	22.28	180	24323	4.82	ug/L	100
74) Naphthalene	22.63	128	32491	5.06	ug/L	99
75) Hexachlorobutadiene	22.68	225	14709	4.71	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	20581	4.91	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031411.M Thu Mar 17 14:00:04 2011

## Quantitation Report

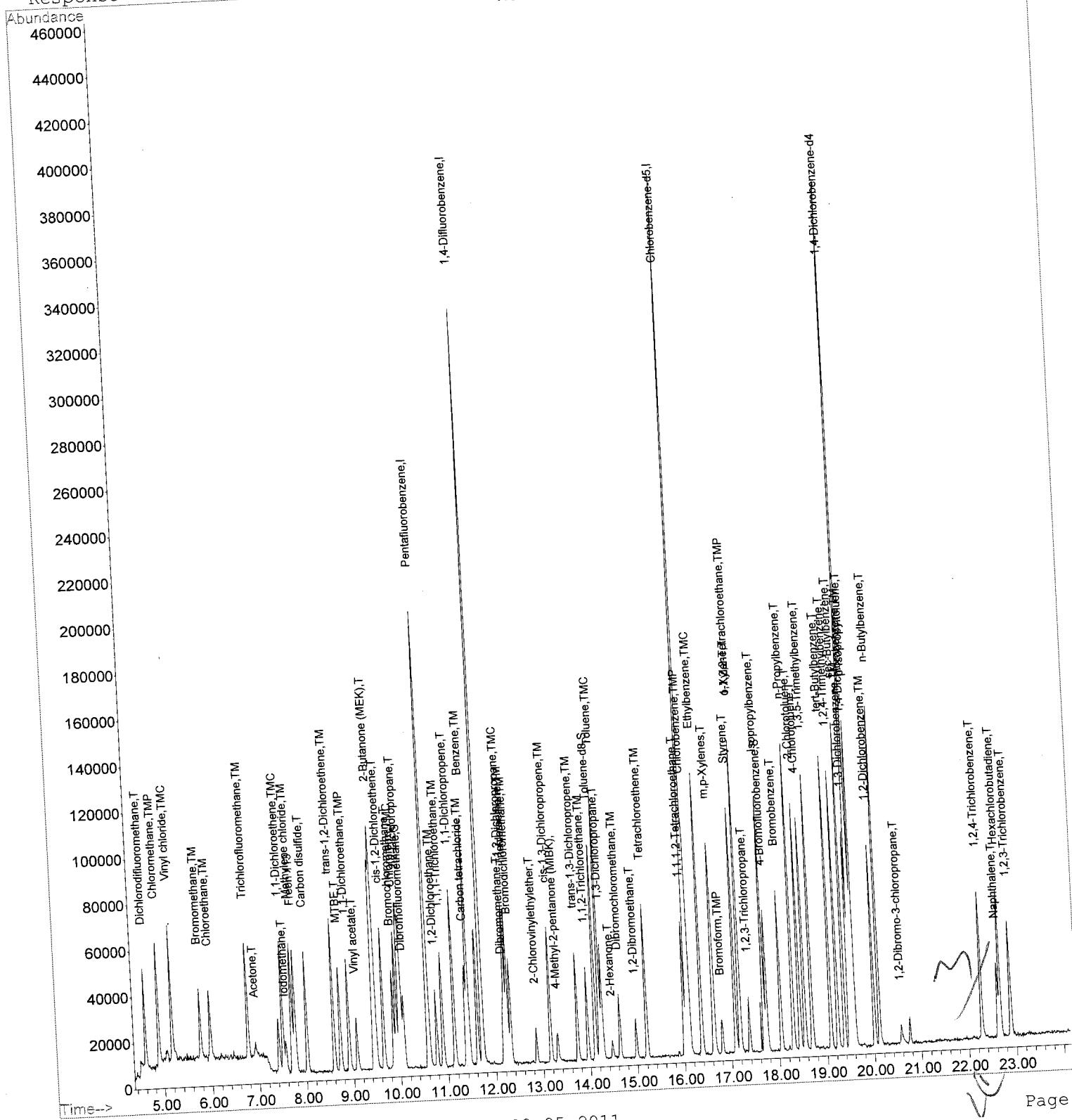
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D  
Acq On : 17 Mar 2011 10:45 am  
Sample : 5.0 PPB  
Misc :  
MS Integration Params: RTEINT2.P Quant Res  
Quant Time: Mar 17 13:59 2011 13:59 2011 /PPB

Vial: 6  
Operator: LC  
Inst : GCMS7  
Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHOD  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171109.D



03171109.D 031411.M

Thu Mar 17 14:00:05 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	42710	10.76	ug/L	0.00
Spiked Amount 25.000			Recovery =	43.04%		
39) Toluene-d8	14.12	98	143321	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery =	40.72%		
53) 4-Bromofluorobenzene	17.75	95	50923	10.16	ug/L	0.00
Spiked Amount 25.000			Recovery =	40.64%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	79957	9.93	ug/L	100
3) Chloromethane	4.89	50	135497	11.91	ug/L	99
4) Vinyl chloride	5.19	62	111850	10.07	ug/L	100
5) Bromomethane	5.78	94	53427	10.86	ug/L	91
6) Chloroethane	5.98	64	63788	10.72	ug/L	98
7) Trichlorofluoromethane	6.78	101	85392	10.27	ug/L	99
8) Acetone	6.94	43	11502	8.08	ug/L	97
9) Iodomethane	7.57	142	36401	9.45	ug/L	95
10) 1,1-Dichloroethene	7.51	96	46909	10.89	ug/L	94
11) Methylene chloride	7.71	84	55460	9.98	ug/L	99
12) Freon 113	7.78	101	52409	9.70	ug/L	99
13) Carbon disulfide	8.03	76	162804	10.64	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.90	ug/L	94
15) MTBE	8.74	73	84759	9.71	ug/L	96
16) 1,1-Dichloroethane	8.92	63	108838	10.26	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.96	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	9.44	ug/L	88
19) cis-1,2-Dichloroethene	9.66	96	53573	9.99	ug/L	98
20) Bromochloromethane	9.88	128	20976	10.55	ug/L	100
21) Chloroform	9.93	83	95119	10.84	ug/L	100
22) 2,2-Dichloropropane	10.04	77	73939	10.10	ug/L	98
24) 1,2-Dichloroethane	10.77	62	53618	10.31	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	66517	10.14	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.21	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.31	ug/L	98
29) Benzene	11.44	78	201076	10.05	ug/L	100
30) Dibromomethane	12.17	93	24596	10.31	ug/L	96
31) 1,2-Dichloropropane	12.21	63	55294	9.87	ug/L	100
32) Trichloroethene	12.27	95	49861	9.89	ug/L	98
33) Bromodichloromethane	12.33	83	60334	10.22	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	9.32	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	73950	10.38	ug/L	98
36) 4-Methyl-2-pantanone (MIBK)	13.31	43	28976	9.23	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.24	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	27640	10.13	ug/L	97
40) Toluene	14.21	92	114354	10.22	ug/L	100
42) 1,3-Dichloropropane	14.27	76	56624	10.10	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031411.M Thu Mar 17 14:00:50 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.10	ug/L	# 96
44) Dibromochloromethane	14.64	129	32389	10.06	ug/L	100
45) 1,2-Dibromoethane	14.98	107	28536	10.44	ug/L	98
46) Tetrachloroethene	15.21	166	44478	10.14	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	10.14	ug/L	99
48) Chlorobenzene	16.12	112	113625	9.85	ug/L	100
49) Ethylbenzene	16.38	91	215370	10.13	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.90	ug/L	98
51) Styrene	17.09	104	115227	9.99	ug/L	98
52) o-Xylene	17.20	106	71920	9.92	ug/L	97
55) Bromoform	16.81	173	16316	10.52	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 99
57) 1,2,3-Trichloropropane	17.39	110	7243	10.53	ug/L	96
58) Isopropylbenzene	17.69	105	176438	10.28	ug/L	100
59) Bromobenzene	18.05	156	40825	10.54	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.34	ug/L	100
61) 2-Chlorotoluene	18.45	91	143783	10.30	ug/L	99
62) 4-Chlorotoluene	18.55	91	141563	10.15	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.35	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.22	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.05	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.06	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.10	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.18	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	69024	10.25	ug/L	100
71) n-Butylbenzene	20.12	91	183374	10.00	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	11.01	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	41924	8.76	ug/L	100
74) Naphthalene	22.63	128	55616	9.13	ug/L	99
75) Hexachlorobutadiene	22.68	225	29027	10.49	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	34759	8.75	ug/L	99

M

V

(#) = qualifier out of range (m) = manual integration  
 (03171110.D 031411.M Thu Mar 17 14:00:50 2011)

Quantitation Report

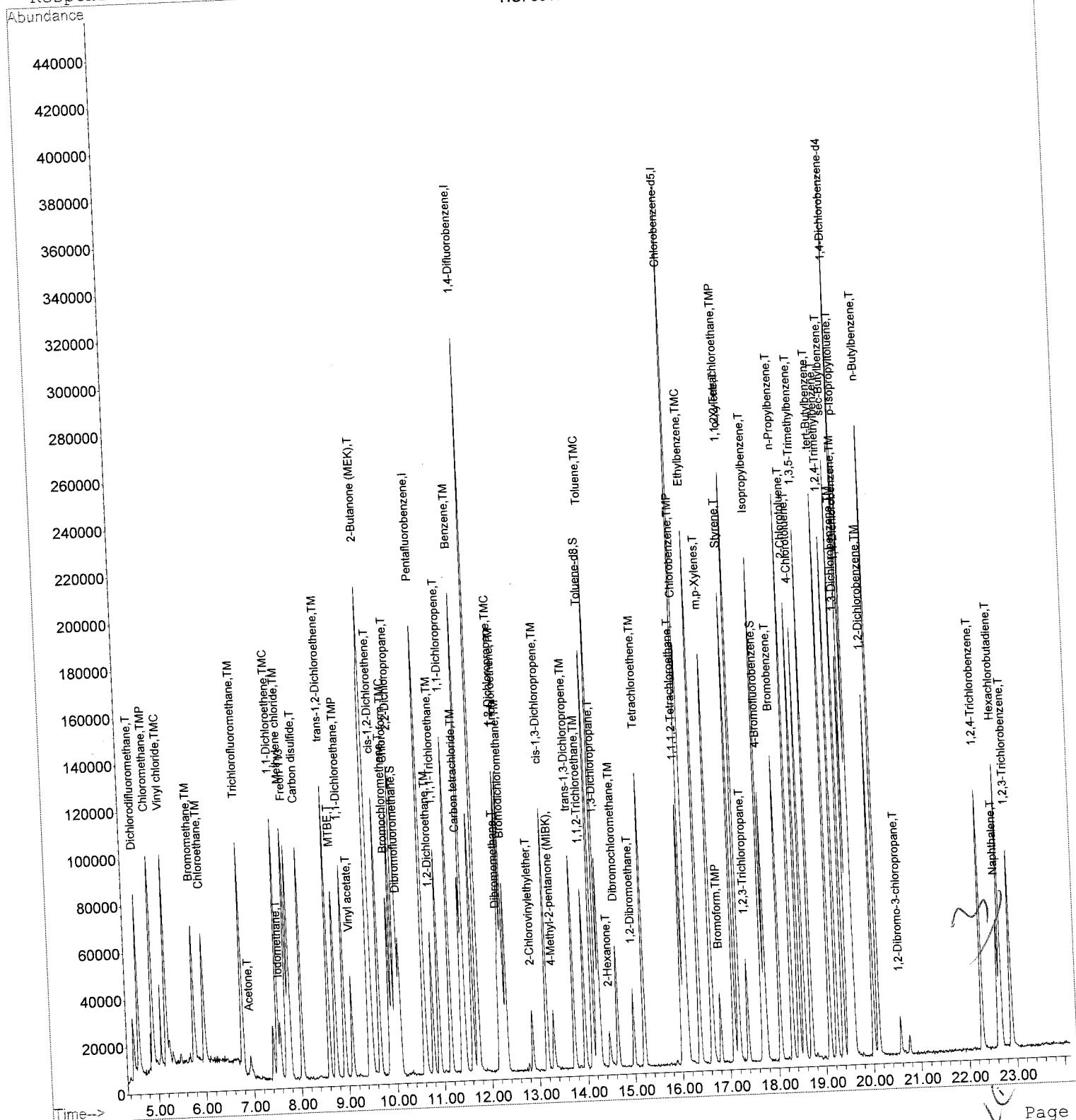
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D  
 Acq On : 17 Mar 2011 11:15 am  
 Sample : 10 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011

Vial: 7  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171110.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	103380	26.41	ug/L	0.00
Spiked Amount 25.000			Recovery =	105.64%		
39) Toluene-d8	14.12	98	359841	25.92	ug/L	0.00
Spiked Amount 25.000			Recovery =	103.68%		
53) 4-Bromofluorobenzene	17.75	95	128707	25.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	103.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	200064	25.20	ug/L	98
3) Chloromethane	4.89	50	322628	28.77	ug/L	99
4) Vinyl chloride	5.18	62	283499	25.90	ug/L	100
5) Bromomethane	5.78	94	141242	29.13	ug/L	96
6) Chloroethane	5.98	64	150117	25.60	ug/L	98
7) Trichlorofluoromethane	6.78	101	214158	26.12	ug/L	99
8) Acetone	6.94	43	25928	23.73	ug/L	98
9) Iodomethane	7.57	142	98109	25.84	ug/L	97
10) 1,1-Dichloroethene	7.51	96	111502	26.67	ug/L	98
11) Methylene chloride	7.71	84	132209	24.14	ug/L	99
12) Freon 113	7.77	101	133636	25.10	ug/L	98
13) Carbon disulfide	8.03	76	401884	27.15	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.92	ug/L	98
15) MTBE	8.74	73	214946	24.98	ug/L	99
16) 1,1-Dichloroethane	8.92	63	264682	25.31	ug/L	99
17) Vinyl acetate	9.08	43	202265	24.98	ug/L	99
18) 2-Butanone (MEK)	9.47	72	6903	24.88	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	131490	24.87	ug/L	99
20) Bromochloromethane	9.87	128	47437	24.21	ug/L	94
21) Chloroform	9.93	83	218360	25.26	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	24.96	ug/L	98
24) 1,2-Dichloroethane	10.78	62	136474	26.62	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	162207	25.09	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.70	ug/L	99
28) Carbon tetrachloride	11.39	117	133369	25.74	ug/L	100
29) Benzene	11.44	78	490622	24.87	ug/L	99
30) Dibromomethane	12.17	93	58067	24.68	ug/L	98
31) 1,2-Dichloropropane	12.21	63	140014	25.35	ug/L	99
32) Trichloroethene	12.27	95	124690	25.08	ug/L	98
33) Bromodichloromethane	12.33	83	150764	25.89	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	21.41	ug/L	98
35) cis-1,3-Dichloropropene	13.16	75	183565	26.14	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	23.09	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.77	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	24.66	ug/L	98
40) Toluene	14.21	92	282149	25.56	ug/L	98
42) 1,3-Dichloropropane	14.27	76	140210	25.26	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031411.M Thu Mar 17 14:01:22 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	23.20	ug/L	# 93
44) Dibromochloromethane	14.64	129	81864	25.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	70424	26.01	ug/L	99
46) Tetrachloroethene	15.21	166	109364	25.16	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	25.31	ug/L	97
48) Chlorobenzene	16.12	112	284407	24.90	ug/L	99
49) Ethylbenzene	16.37	91	538674	25.57	ug/L	99
50) m,p-Xylenes	16.64	106	186494	25.11	ug/L	99
51) Styrene	17.09	104	295005	25.82	ug/L	97
52) o-Xylene	17.19	106	177920	24.79	ug/L	95
55) Bromoform	16.81	173	42372	26.71	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	24.99	ug/L	95
57) 1,2,3-Trichloropropane	17.38	110	18834	26.78	ug/L	100
58) Isopropylbenzene	17.69	105	445254	25.36	ug/L	98
59) Bromobenzene	18.05	156	105054	26.51	ug/L	99
60) n-Propylbenzene	18.30	91	632559	25.51	ug/L	100
61) 2-Chlorotoluene	18.44	91	364433	25.52	ug/L	99
62) 4-Chlorotoluene	18.55	91	369067	25.87	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.55	ug/L	99
64) tert-Butylbenzene	19.09	119	324112	25.26	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.14	ug/L	99
66) sec-Butylbenzene	19.37	105	556785	25.52	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	205642	25.27	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	201942	24.80	ug/L	100
69) p-Isopropyltoluene	19.61	119	434002	25.61	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	178826	25.97	ug/L	100
71) n-Butylbenzene	20.12	91	487367	26.00	ug/L	95
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	26.23	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	122376	25.01	ug/L	99
74) Naphthalene	22.63	128	163821	26.30	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	28.14	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	101564	24.99	ug/L	100

*M**V*

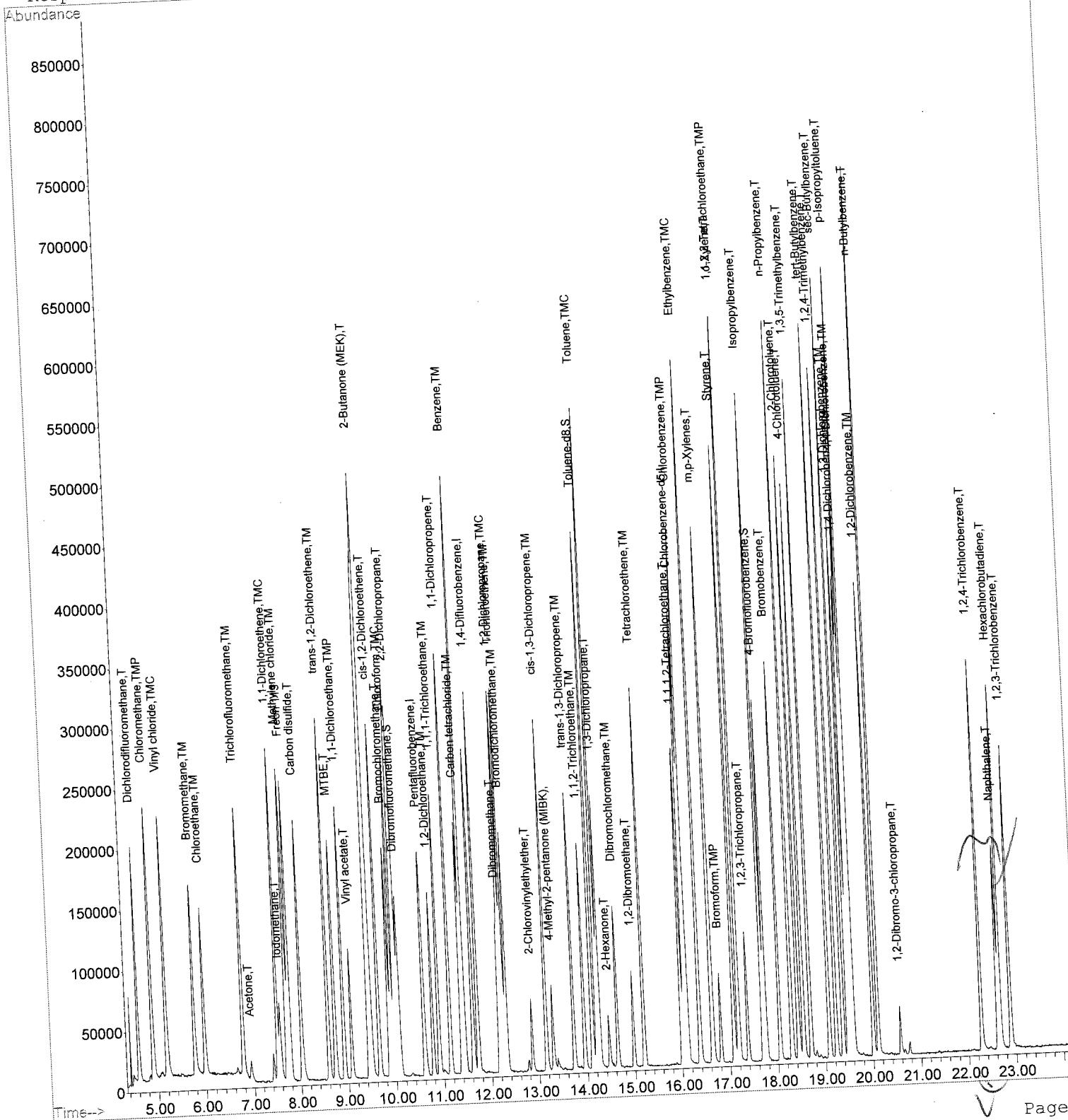
(#) = qualifier out of range (m) = manual integration  
 03171111.D 031411.M Thu Mar 17 14:01:22 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
Acq On : 17 Mar 2011 11:46 am Operator: LC  
Sample : 25 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 14:00 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\0317111.D  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171111.D



03171111.D 031411.M

Thu Mar 17 14:01:23 2011

78 of 285

Page

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:01 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	202044	49.12	ug/L	0.00
Spiked Amount 25.000			Recovery =	196.48%		
39) Toluene-d8	14.11	98	726789	50.32	ug/L	0.00
Spiked Amount 25.000			Recovery =	201.28%		
53) 4-Bromofluorobenzene	17.76	95	259969	50.54	ug/L	0.00
Spiked Amount 25.000			Recovery =	202.16%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	391099	46.88	ug/L	100
3) Chloromethane	4.90	50	687656	58.35	ug/L	100
4) Vinyl chloride	5.18	62	596978	51.89	ug/L	98
5) Bromomethane	5.78	94	296252	58.13	ug/L	98
6) Chloroethane	5.99	64	300876	48.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	340516	39.53	ug/L	98
8) Acetone	6.93	43	44278	Below Cal		99
9) Iodomethane	7.58	142	195341	48.96	ug/L	99
10) 1,1-Dichloroethene	7.52	96	220268	50.38	ug/L	97
11) Methylene chloride	7.71	84	264019	45.88	ug/L	99
12) Freon 113	7.78	101	262900	47.00	ug/L	100
13) Carbon disulfide	8.03	76	807912	52.24	ug/L	98
14) trans-1,2-Dichloroethene	8.60	96	248724	46.50	ug/L	98
15) MTBE	8.73	73	407385	45.06	ug/L	100
16) 1,1-Dichloroethane	8.92	63	517515	47.09	ug/L	100
17) Vinyl acetate	9.08	43	400997	47.13	ug/L	100
18) 2-Butanone (MEK)	9.47	72	13656	46.83	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	257331	46.32	ug/L	98
20) Bromochloromethane	9.87	128	96376	46.81	ug/L	99
21) Chloroform	10.03	77	364919	48.12	ug/L	99
22) 2,2-Dichloropropane	10.78	62	261605	48.57	ug/L	99
24) 1,2-Dichloroethane	10.91	97	323769	47.65	ug/L	99
25) 1,1,1-Trichloroethane	11.15	75	381624	49.22	ug/L	99
27) 1,1-Dichloropropene	11.39	117	268038	49.71	ug/L	100
28) Carbon tetrachloride	11.44	78	1008066	49.11	ug/L	99
29) Benzene	12.17	93	116662	47.65	ug/L	97
30) Dibromomethane	12.21	63	281688	49.02	ug/L	99
31) 1,2-Dichloropropane	12.26	95	255144	49.32	ug/L	98
32) Trichloroethene	12.33	83	300337	49.57	ug/L	99
33) Bromodichloromethane	12.86	63	52192	37.02	ug/L	99
34) 2-Chlorovinylethylether	13.17	75	364674	49.91	ug/L	100
35) cis-1,3-Dichloropropene	13.30	43	143476	44.54	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.73	75	289421	50.71	ug/L	100
37) trans-1,3-Dichloropropene	13.95	83	131924	47.11	ug/L	97
38) 1,1,2-Trichloroethane	14.22	92	583744	50.83	ug/L	100
40) Toluene	14.27	76	277506	48.23	ug/L	99
42) 1,3-Dichloropropane						

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031411.M Thu Mar 17 14:02:05 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:01 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	48.63	ug/L	# 100
44) Dibromochloromethane	14.65	129	168655	51.01	ug/L	99
45) 1,2-Dibromoethane	14.98	107	142279	50.69	ug/L	99
46) Tetrachloroethene	15.20	166	223148	49.54	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	50.19	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.72	ug/L	99
49) Ethylbenzene	16.38	91	1095906	50.20	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.92	ug/L	97
51) Styrene	17.10	104	602783	50.90	ug/L	100
52) o-Xylene	17.20	106	366193	49.22	ug/L	100
55) Bromoform	16.82	173	87491	53.39	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.00	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	51.09	ug/L	99
58) Isopropylbenzene	17.70	105	904235	49.87	ug/L	99
59) Bromobenzene	18.05	156	210716	51.49	ug/L	98
60) n-Propylbenzene	18.30	91	1279523	49.95	ug/L	99
61) 2-Chlorotoluene	18.45	91	736550	49.95	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.28	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.43	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	49.92	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	772492	49.11	ug/L	98
66) sec-Butylbenzene	19.38	105	1121222	49.75	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	414698	49.34	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	411367	48.92	ug/L	99
69) p-Isopropyltoluene	19.61	119	866615	49.52	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	50.59	ug/L	100
71) n-Butylbenzene	20.11	91	964633	49.82	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	50.62	ug/L	96
73) 1,2,4-Trichlorobenzene	22.28	180	240360	47.56	ug/L	100
74) Naphthalene	22.63	128	314469	48.88	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	53.99	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	192513	45.85	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031411.M Thu Mar 17 14:02:06 2011

Quantitation Report

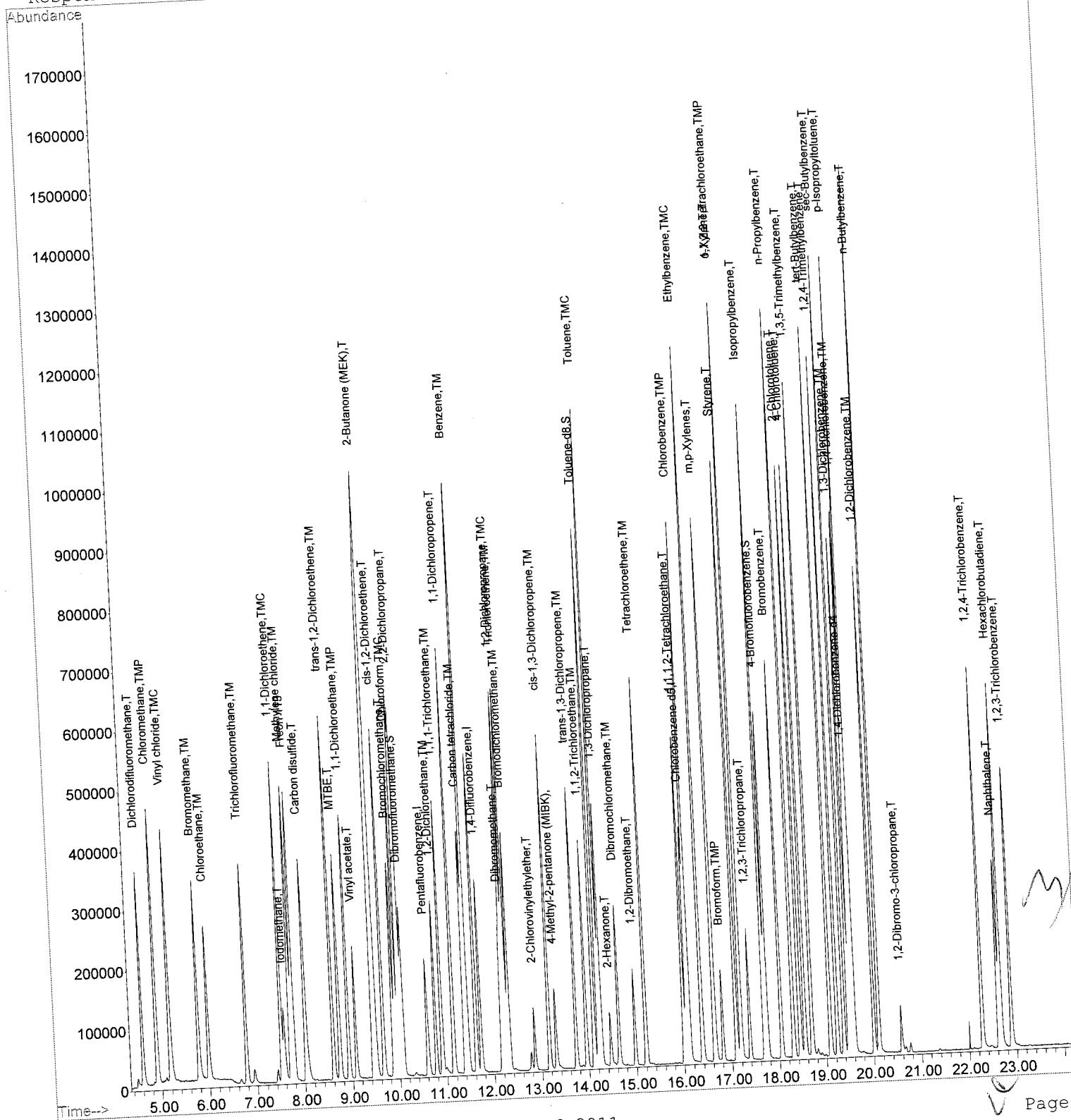
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D  
 Acq On : 17 Mar 2011 12:17 pm  
 Sample : 50 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011

Vial: 9  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171112.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane Spiked Amount 25.000	10.09	113	425047	101.93	ug/L	0.00
39) Toluene-d8 Spiked Amount 25.000	14.12	98	1505447	102.12	ug/L	0.00
53) 4-Bromofluorobenzene Spiked Amount 25.000	17.75	95	536695	104.44	ug/L	0.00
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	779223	92.13	ug/L	100
3) Chloromethane	4.90	50	1431368	119.80	ug/L	100
4) Vinyl chloride	5.18	62	1228117	105.30	ug/L	100
5) Bromomethane	5.78	94	641424	124.14	ug/L	98
6) Chloroethane	5.98	64	584071	93.50	ug/L	99
7) Trichlorofluoromethane	6.78	101	698452	79.96	ug/L	99
8) Acetone	6.94	43	84316	Below Cal		96
9) Iodomethane	7.58	142	393011	97.15	ug/L	97
10) 1,1-Dichloroethene	7.52	96	450680	101.96	ug/L	100
11) Methylene chloride	7.71	84	530536	90.93	ug/L	100
12) Freon 113	7.78	101	537890	94.84	ug/L	100
13) Carbon disulfide	8.04	76	1652598	105.75	ug/L	95
14) trans-1,2-Dichloroethene	8.60	96	514680	94.91	ug/L	100
15) MTBE	8.74	73	859812	93.80	ug/L	100
16) 1,1-Dichloroethane	8.93	63	1054794	94.66	ug/L	100
17) Vinyl acetate	9.08	43	827230	95.91	ug/L	95
18) 2-Butanone (MEK)	9.47	72	27904	94.38	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	527963	93.73	ug/L	99
20) Bromochloromethane	9.87	128	191014	91.51	ug/L	99
21) Chloroform	9.93	83	877382	95.25	ug/L	100
22) 2,2-Dichloropropane	10.04	77	739530	96.19	ug/L	100
24) 1,2-Dichloroethane	10.78	62	540824	99.03	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	659685	95.75	ug/L	99
27) 1,1-Dichloropropene	11.15	75	764611	96.61	ug/L	100
28) Carbon tetrachloride	11.39	117	547122	99.42	ug/L	100
29) Benzene	11.44	78	2051183	97.90	ug/L	98
30) Dibromomethane	12.17	93	236182	94.51	ug/L	99
31) 1,2-Dichloropropane	12.21	63	573859	97.85	ug/L	98
32) Trichloroethene	12.27	95	518186	98.14	ug/L	99
33) Bromodichloromethane	12.33	83	619726	100.21	ug/L	98
34) 2-Chlorovinylethylether	12.86	63	99299	69.01	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	755768	101.34	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	94.02	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	581943	99.90	ug/L	97
38) 1,1,2-Trichloroethane	13.95	83	272981	95.51	ug/L	100
40) Toluene	14.22	92	1181672	100.81	ug/L	100
42) 1,3-Dichloropropane	14.27	76	562918	97.92	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031411.M Thu Mar 17 14:02:38 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	102.53	ug/L	97
44) Dibromochloromethane	14.65	129	341882	103.49	ug/L	99
45) 1,2-Dibromoethane	14.98	107	294156	104.89	ug/L	100
46) Tetrachloroethene	15.20	166	455622	101.24	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	103.59	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.63	ug/L	99
49) Ethylbenzene	16.38	91	2245318	102.94	ug/L	99
50) m,p-Xylenes	16.64	106	773283	100.56	ug/L	100
51) Styrene	17.10	104	1244691	105.20	ug/L	100
52) o-Xylene	17.20	106	750628	100.99	ug/L	97
55) Bromoform	16.82	173	182147	107.85	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.48	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	75618	101.00	ug/L	100
58) Isopropylbenzene	17.70	105	1844526	98.70	ug/L	99
59) Bromobenzene	18.05	156	429425	101.80	ug/L	100
60) n-Propylbenzene	18.30	91	2615929	99.09	ug/L	99
61) 2-Chlorotoluene	18.45	91	1500663	98.74	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.30	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	99.53	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	98.40	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	97.37	ug/L	100
66) sec-Butylbenzene	19.39	105	2280043	98.16	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	97.78	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.72	ug/L	100
69) p-Isopropyltoluene	19.61	119	1785874	99.02	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	99.76	ug/L	99
71) n-Butylbenzene	20.12	91	1981760	99.31	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	99.91	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	510699	98.06	ug/L	100
74) Naphthalene	22.63	128	678287	102.29	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	110.66	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	412634	95.36	ug/L	99

*M**V*  
Page

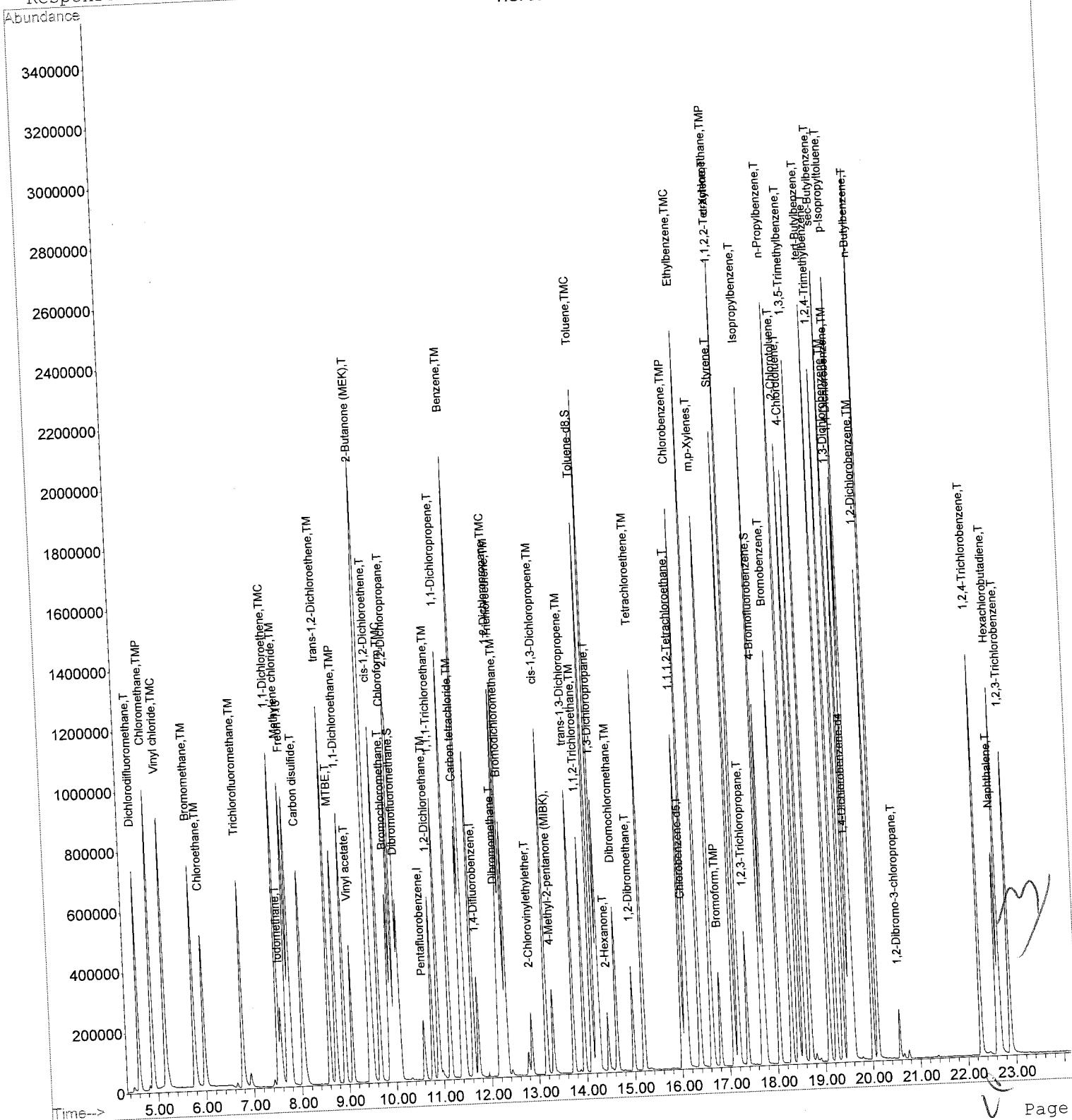
(#) = qualifier out of range (m) = manual integration  
 03171113.D 031411.M Thu Mar 17 14:02:38 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011 Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171113.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	839626	197.42	ug/L	0.00
Spiked Amount 25.000			Recovery =	789.68%		
39) Toluene-d8	14.12	98	3013932	203.78	ug/L	0.00
Spiked Amount 25.000			Recovery =	815.12%		
53) 4-Bromofluorobenzene	17.76	95	1038923	199.04	ug/L	0.00
Spiked Amount 25.000			Recovery =	796.16%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	1487523	172.44	ug/L	99
3) Chloromethane	4.90	50	2913054	239.06	ug/L	100
4) Vinyl chloride	5.16	62	2428967	204.20	ug/L	99
5) Bromomethane	5.78	94	1343422	254.94	ug/L	98
6) Chloroethane	5.98	64	1199344	188.24	ug/L	99
7) Trichlorofluoromethane	6.79	101	1701514	191.01	ug/L	100
8) Acetone	6.94	43	201529	Below Cal		
9) Iodomethane	7.58	142	794173	192.50	ug/L	99
10) 1,1-Dichloroethene	7.52	96	920511	204.48	ug/L	96
11) Methylene chloride	7.71	84	1063508	178.73	ug/L	98
12) Freon 113	7.78	101	1079115	186.56	ug/L	99
13) Carbon disulfide	8.03	76	3312605	208.15	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	187.33	ug/L	96
15) MTBE	8.74	73	1719756	183.97	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	185.27	ug/L	99
17) Vinyl acetate	9.08	43	1660788	188.79	ug/L	100
18) 2-Butanone (MEK)	9.47	72	57153	189.53	ug/L	98
19) cis-1,2-Dichloroethene	9.66	96	1073476	186.86	ug/L	98
20) Bromochloromethane	9.88	128	361702	169.90	ug/L	99
21) Chloroform	9.93	83	1746080	185.86	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	184.71	ug/L	99
24) 1,2-Dichloroethane	10.78	62	1056987	189.77	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	1325051	188.58	ug/L	99
27) 1,1-Dichloropropene	11.15	75	1539559	193.90	ug/L	100
28) Carbon tetrachloride	11.39	117	1092097	197.81	ug/L	100
29) Benzene	11.45	78	4061777	193.23	ug/L	99
30) Dibromomethane	12.17	93	461244	183.97	ug/L	99
31) 1,2-Dichloropropane	12.21	63	1126863	191.52	ug/L	99
32) Trichloroethene	12.27	95	1022222	192.97	ug/L	100
33) Bromodichloromethane	12.33	83	1217593	196.24	ug/L	98
34) 2-Chlorovinylethylether	12.86	63	174106	120.61	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	199.81	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	183.63	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.49	ug/L	98
38) 1,1,2-Trichloroethane	13.95	83	536251	187.01	ug/L	98
40) Toluene	14.22	92	2368495	201.40	ug/L	100
42) 1,3-Dichloropropane	14.28	76	1107954	189.75	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031411.M Thu Mar 17 14:03:08 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	196.91	ug/L	# 97
44) Dibromochloromethane	14.65	129	686033	204.44	ug/L	100
45) 1,2-Dibromoethane	14.99	107	575405	202.00	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.99	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	207.25	ug/L	99
48) Chlorobenzene	16.13	112	2393108	199.20	ug/L	97
49) Ethylbenzene	16.38	91	4465000	201.54	ug/L	98
50) m,p-Xylenes	16.64	106	1550944	198.56	ug/L	99
51) Styrene	17.10	104	2561762	213.16	ug/L	99
52) o-Xylene	17.20	106	1517247	200.97	ug/L	100
55) Bromoform	16.82	173	364089	189.30	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.64	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	155202	182.01	ug/L	98
58) Isopropylbenzene	17.70	105	3655213	171.73	ug/L	99
59) Bromobenzene	18.05	156	865850	180.23	ug/L	97
60) n-Propylbenzene	18.31	91	5305462	176.46	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	180.76	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.25	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	192.28	ug/L	99
64) tert-Butylbenzene	19.09	119	2997423	192.66	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	186.05	ug/L	97
66) sec-Butylbenzene	19.39	105	5038432	190.46	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	1885851	191.15	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.79	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	195.79	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	1645465	197.15	ug/L	98
71) n-Butylbenzene	20.12	91	4374192	192.47	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	195.71	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	186.75	ug/L	100
74) Naphthalene	22.63	128	1413680	187.19	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	212.10	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	830638	168.55	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031411.M Thu Mar 17 14:03:09 2011

Page 2

Quantitation Report

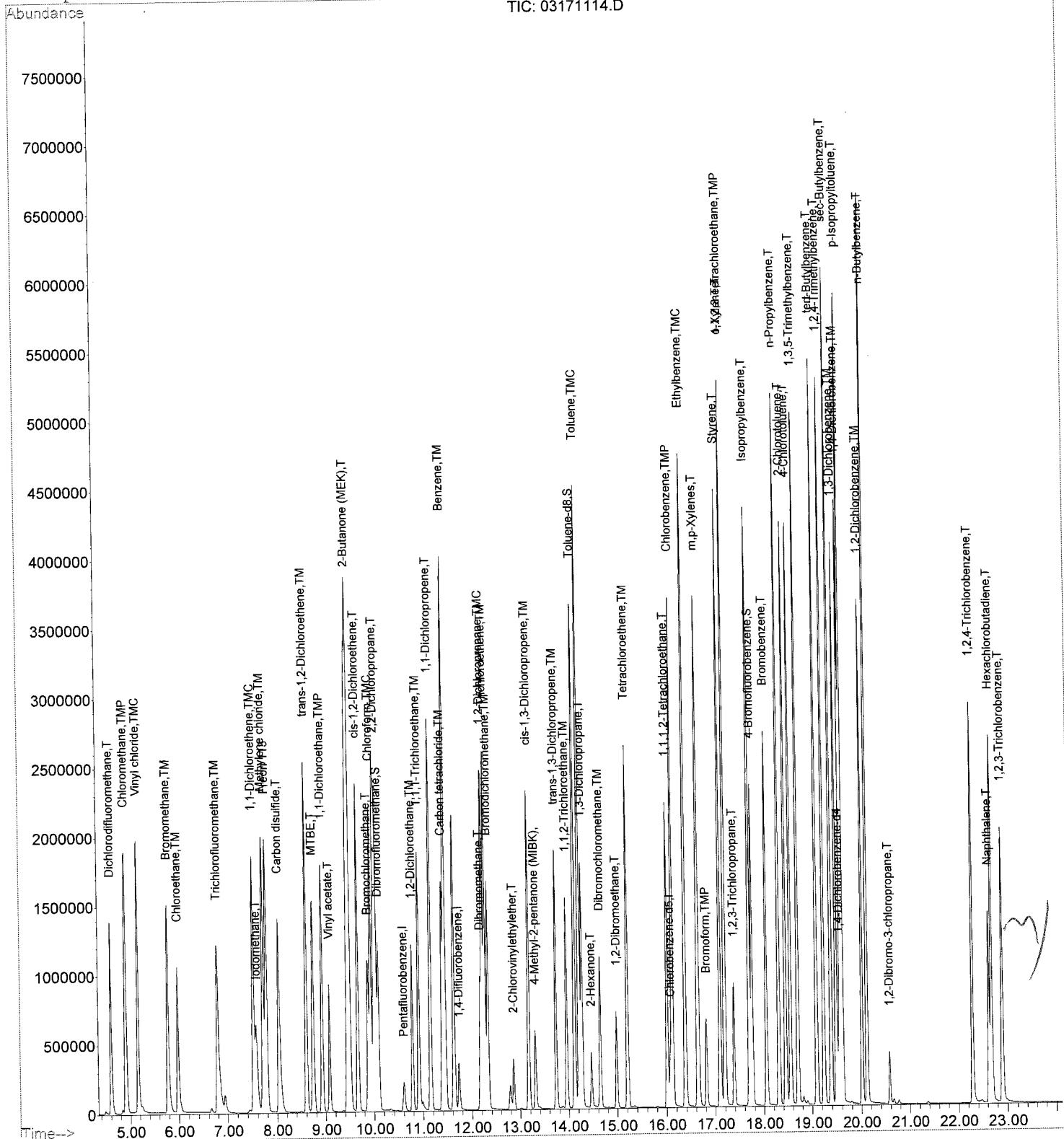
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D  
 Acq On : 17 Mar 2011 1:19 pm  
 Sample : 200 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011

Vial: 12  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171114.D



## NEW8260-CCV

**Data File Name** 03171115.D  
**Data File Path** C:\HPCHEM\1\GCMS7\DATA\031711\  
**Operator** LC  
**Date Acquired** 3/17/2011 1:50  
**Acq. Method File** 8260B  
**Sample Name** SS  
**Instrument Name** GCMS7

<b>Internal Standard</b>	<b>Target Response</b>	<b>CCV Response</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>	
Pentafluorobenzene	204788	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	354603	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	296499	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	131216	112264	56132	224528	TRUE	
<b>Name</b>	<b>Amount</b>	<b>Spike Amount</b>	<b>% REC</b>	<b>Low</b>	<b>High</b>	<b>T/F</b>
Dichlorodifluoromethane	21.34	25.00	85.36	60	150	TRUE
Chloromethane	20.19	25.00	80.77	60	140	TRUE
Vinyl chloride	21.98	25.00	87.90	80	120	TRUE CCC
Bromomethane	21.20	25.00	84.79	70	140	TRUE
Chloroethane	21.91	25.00	87.64	70	130	TRUE
Trichlorofluoromethane	25.44	25.00	101.76	70	150	TRUE
Acetone	32.58	25.00	130.32	10	150	TRUE
Iodomethane	30.91	25.00	123.66	70	140	TRUE CCC
1,1-Dichloroethene	24.98	25.00	99.91	80	120	TRUE
Methylene chloride	24.09	25.00	96.37	70	120	TRUE
Freon 113	24.00	25.00	95.98	60	140	TRUE
Carbon disulfide	25.08	25.00	100.31	70	130	TRUE
trans-1,2-Dichloroethene	21.70	25.00	86.79	80	120	TRUE
MTBE	20.73	25.00	82.90	70	130	TRUE
1,1-Dichloroethane	20.79	25.00	83.16	70	125	TRUE
Vinyl acetate	26.90	25.00	107.60	40	150	TRUE
2-Butanone (MEK)	24.92	25.00	99.67	40	150	TRUE
cis-1,2-Dichloroethene	20.20	25.00	80.78	80	120	TRUE CCC
Bromochloromethane	21.09	25.00	84.35	80	120	TRUE
Chloroform	20.32	25.00	81.28	80	120	TRUE CCC
2,2-Dichloropropane	21.15	25.00	84.60	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>21.57</b>	<b>25.00</b>	<b>86.27</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	20.57	25.00	82.26	75	130	TRUE
1,1,1-Trichloroethane	21.81	25.00	87.23	80	120	TRUE
1,1-Dichloropropene	22.05	25.00	88.19	80	120	TRUE
Carbon tetrachloride	22.49	25.00	89.96	80	130	TRUE
Benzene	21.24	25.00	84.94	80	120	TRUE
Dibromomethane	22.05	25.00	88.19	80	120	TRUE CCC
1,2-Dichloropropane	21.44	25.00	85.74	80	120	TRUE
Trichloroethene	21.49	25.00	85.98	80	120	TRUE
Bromodichloromethane	21.49	25.00	85.95	80	120	TRUE
2-Chlorovinylethylether	33.03	25.00	132.10	70	135	TRUE
cis-1,3-Dichloropropene	21.67	25.00	86.67	80	120	TRUE
4-Methyl-2-pentanone (MIB)	23.62	25.00	94.48	60	130	TRUE
trans-1,3-Dichloropropene	22.74	25.00	90.94	80	125	TRUE

1,1,2-Trichloroethane	22.20	25.00	88.81	80	120	TRUE	
Toluene-d8	<b>21.91</b>	<b>25.00</b>	<b>87.66</b>	<b>80</b>	<b>120</b>	TRUE	
Toluene	21.78	25.00	87.14	80	120	TRUE	CCC
1,3-Dichloropropane	21.05	25.00	84.20	80	120	TRUE	
2-Hexanone	25.08	25.00	100.33	20	150	TRUE	
Dibromochloromethane	21.71	25.00	86.84	80	120	TRUE	
1,2-Dibromoethane	22.31	25.00	89.25	80	120	TRUE	
Tetrachloroethene	22.09	25.00	88.37	70	130	TRUE	
1,1,1,2-Tetrachloroethane	21.46	25.00	85.82	80	120	TRUE	
Chlorobenzene	21.76	25.00	87.05	80	120	TRUE	CCC
Ethylbenzene	21.51	25.00	86.06	80	120	TRUE	
m,p-Xylenes	21.31	25.00	85.25	60	140	TRUE	
Styrene	23.00	25.00	92.00	80	120	TRUE	
o-Xylene	20.70	25.00	82.81	80	120	TRUE	
<b>4-Bromofluorobenzene</b>	<b>20.94</b>	<b>25.00</b>	<b>83.76</b>	<b>80</b>	<b>120</b>	TRUE	
Bromoform	24.45	25.00	97.79	80	120	TRUE	
1,1,2,2-Tetrachloroethane	23.28	25.00	93.12	80	120	TRUE	
1,2,3-Trichloropropane	23.38	25.00	93.50	70	130	TRUE	
Isopropylbenzene	25.73	25.00	102.90	80	130	TRUE	
Bromobenzene	24.00	25.00	96.00	80	120	TRUE	
n-Propylbenzene	24.01	25.00	96.04	75	130	TRUE	
2-Chlorotoluene	22.31	25.00	89.23	80	120	TRUE	
4-Chlorotoluene	23.19	25.00	92.75	80	120	TRUE	
1,3,5-Trimethylbenzene	23.39	25.00	93.56	80	130	TRUE	
tert-Butylbenzene	23.30	25.00	93.19	80	120	TRUE	
1,2,4-Trimethylbenzene	23.52	25.00	94.06	80	120	TRUE	
sec-Butylbenzene	22.94	25.00	91.76	80	125	TRUE	
1,3-Dichlorobenzene	22.83	25.00	91.30	80	120	TRUE	
1,4-Dichlorobenzene	22.81	25.00	91.26	80	120	TRUE	
p-Isopropyltoluene	23.58	25.00	94.31	80	130	TRUE	
1,2-Dichlorobenzene	22.83	25.00	91.31	80	120	TRUE	
n-Butylbenzene	23.80	25.00	95.22	80	130	TRUE	
1,2-Dibromo-3-chloropropane	24.52	25.00	98.10	50	150	TRUE	
1,2,4-Trichlorobenzene	25.88	25.00	103.53	50	150	TRUE	
Naphthalene	30.38	25.00	121.52	40	150	TRUE	
Hexachlorobutadiene	24.16	25.00	96.62	40	150	TRUE	
1,2,3-Trichlorobenzene	25.60	25.00	102.42	60	140	TRUE	

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B

Last Update : Thu Mar 17 14:08:36 2011

Response via : Initial Calibration

DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
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1) Pentafluorobenzene	10.61	168	204788	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	354603	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	296499	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131216	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.10	113	111142	21.57	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.28%	
39) Toluene-d8	14.12	98	391936	21.91	ug/L	0.00
Spiked Amount 25.000			Recovery	=	87.64%	
53) 4-Bromofluorobenzene	17.75	95	136070	20.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	83.76%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.61	85	206452	21.34	ug/L	99
3) Chloromethane	4.90	50	322987	20.19	ug/L	98
4) Vinyl chloride	5.19	62	312968	21.98	ug/L	100
5) Bromomethane	5.78	94	156914	21.20	ug/L	98
6) Chloroethane	5.99	64	165417	21.91	ug/L	99
7) Trichlorofluoromethane	6.79	101	251907	25.44	ug/L	99
8) Acetone	6.94	43	38773	32.58	ug/L	98
9) Iodomethane	7.58	142	141683	30.91	ug/L	98
10) 1,1-Dichloroethene	7.52	96	144273	24.98	ug/L	98
11) Methylene chloride	7.72	84	163712	24.09	ug/L	99
12) Freon 113	7.78	101	164091	24.00	ug/L	99
13) Carbon disulfide	8.04	76	515335	25.08	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	138660	21.70	ug/L	94
15) MTBE	8.75	73	226347	20.73	ug/L	99
16) 1,1-Dichloroethane	8.92	63	277166	20.79	ug/L	99
17) Vinyl acetate	9.08	43	278544	26.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7971	24.92	ug/L	55
19) cis-1,2-Dichloroethene	9.67	96	133655	20.20	ug/L	99
20) Bromochloromethane	9.88	128	51073	21.09	ug/L	97
21) Chloroform	9.94	83	223530	20.32	ug/L	99
22) 2,2-Dichloropropane	10.04	77	188645	21.15	ug/L	97
24) 1,2-Dichloroethane	10.78	62	138066	20.57	ug/L	100
25) 1,1,1-Trichloroethane	10.92	97	172274	21.81	ug/L	97
27) 1,1-Dichloropropene	11.15	75	200126	22.05	ug/L	99
28) Carbon tetrachloride	11.39	117	140957	22.49	ug/L	99
29) Benzene	11.44	78	515367	21.24	ug/L	100
30) Dibromomethane	12.18	93	63306	22.05	ug/L	98
31) 1,2-Dichloropropane	12.22	63	145297	21.44	ug/L	100
32) Trichloroethene	12.27	95	130435	21.49	ug/L	100
33) Bromodichloromethane	12.34	83	153079	21.49	ug/L	99
34) 2-Chlorovinylether	12.86	63	40803	33.03	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	187370	21.67	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	83668	23.62	ug/L	99
37) trans-1,3-Dichloropropene	13.74	75	151736	22.74	ug/L	100
38) 1,1,2-Trichloroethane	13.96	83	71241	22.20	ug/L	98
40) Toluene	14.22	92	300558	21.78	ug/L	97
42) 1,3-Dichloropropane	14.27	76	141234	21.05	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171115.D 031711.M Thu Mar 17 14:48:24 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	56108	25.08	ug/L	# 94
44) Dibromochloromethane	14.65	129	87587	21.71	ug/L	95
45) 1,2-Dibromoethane	14.99	107	75157	22.31	ug/L	99
46) Tetrachloroethene	15.21	166	117481	22.09	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	94210	21.46	ug/L	97
48) Chlorobenzene	16.12	112	303242	21.76	ug/L	99
49) Ethylbenzene	16.38	91	564816	21.51	ug/L	100
50) m,p-Xylenes	16.65	106	195974	21.31	ug/L	98
51) Styrene	17.10	104	320734	23.00	ug/L	98
52) o-Xylene	17.19	106	185035	20.70	ug/L	99
55) Bromoform	16.81	173	46447	24.45	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.19	83	89438	23.28	ug/L	100
57) 1,2,3-Trichloropropane	17.39	110	19539	23.38	ug/L	94
58) Isopropylbenzene	17.70	105	516912	25.73	ug/L	100
59) Bromobenzene	18.06	156	111249	24.00	ug/L	99
60) n-Propylbenzene	18.31	91	688724	24.01	ug/L	100
61) 2-Chlorotoluene	18.45	91	374880	22.31	ug/L	100
62) 4-Chlorotoluene	18.55	91	386272	23.19	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	406096	23.39	ug/L	100
64) tert-Butylbenzene	19.10	119	344368	23.30	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	410391	23.52	ug/L	99
66) sec-Butylbenzene	19.38	105	581187	22.94	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	215599	22.83	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	216972	22.81	ug/L	99
69) p-Isopropyltoluene	19.61	119	456572	23.58	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	187538	22.83	ug/L	99
71) n-Butylbenzene	20.12	91	513084	23.80	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	12556	24.52	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	137336	25.88	ug/L	99
74) Naphthalene	22.63	128	213772	30.38	ug/L	100
75) Hexachlorobutadiene	22.69	225	81857	24.16	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	110762	25.60	ug/L	99

91 of 285 ge 2

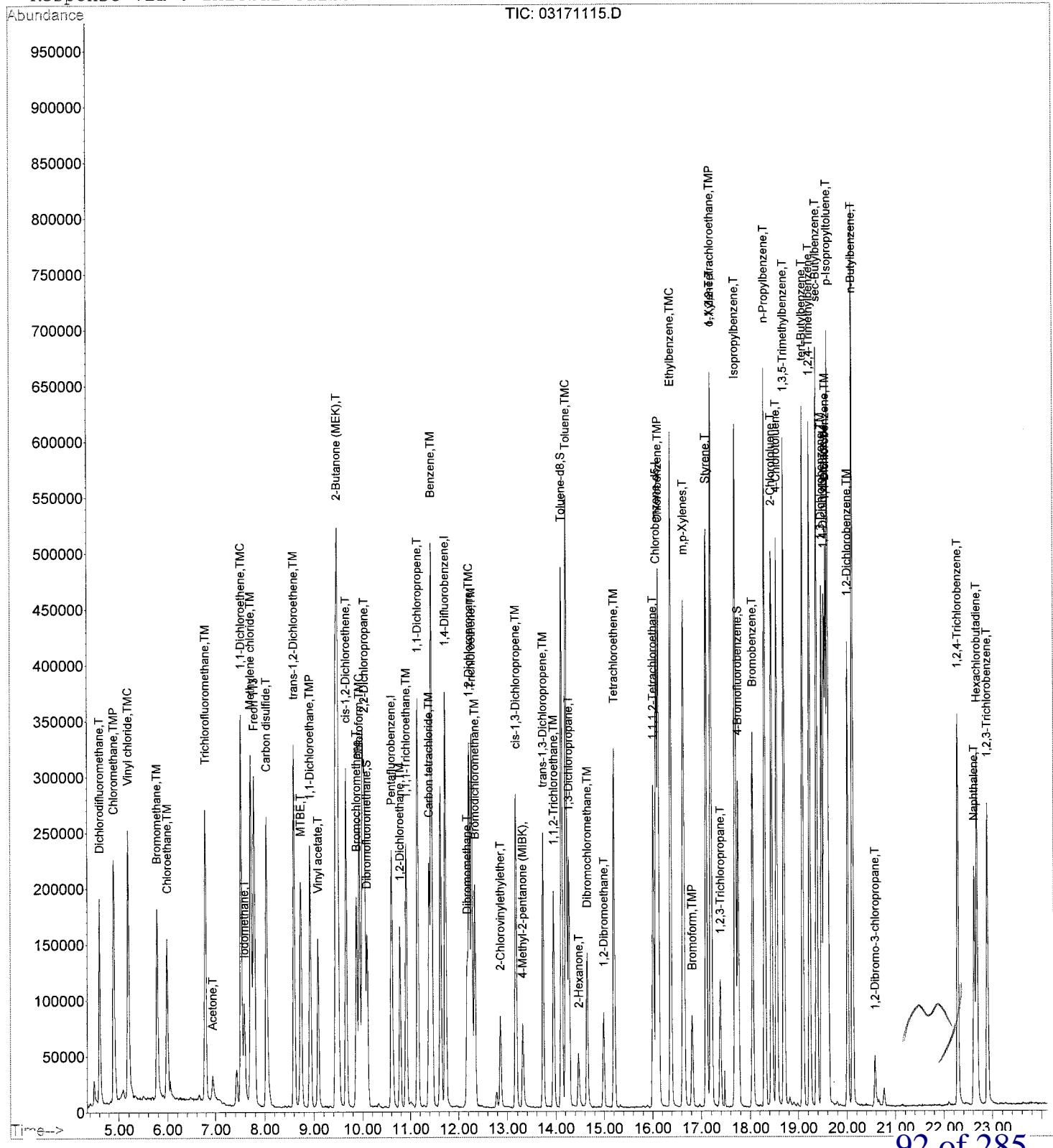
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
Acq On : 17 Mar 2011 1:50 pm Operator: LC  
Sample : SS Inst : GCMS7  
Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:48 2011

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



# 8260AZ - Vapor Analysis 1 PPMV Tertiary Standard

3/17/2011

\* Compound not in the standard mix

ppmv	Mol Wt.	ug/L
1	260.76	10.80

Conversion Calculation:  $\text{ug/L} = \text{ppmv} \cdot \frac{(\text{MW} \cdot \text{P})}{(\text{R} \cdot \text{T})}$

R=Gas Constant(0.08206 l\*atm/(mol\*K)) MW=Molecular Weight  
 T=Temp in Degree K (21+273.15) P=Pressure in atm  
 Assume Temp in C of 21 (70 degrees F)

<u>Compound</u>	<u>Molecular Weight</u>	<u>Expected Value (ug/L)</u>	<u>Actual Value (ug/L)</u>	<u>% Recovery</u>
Dichlorodifluoromethane	120.91	5.01	6.05	121
Chloromethane	50.49	2.09	2.13	102
Vinyl Chloride	62.5	2.59	2.49	96
Bromomethane	94.94	3.93	1.91	49
Chloroethane	64.52	2.67	2.56	96
Trichlorofluoromethane	137.37	5.69	5.99	105
Acetone *				
Iodomethane *				
1,1-Dichloroethene	96.94	4.02	3.55	88
Methylene Chloride	84.93	3.52	3.35	95
Carbon Disulfide *				
trans-1,2-DCE *				
MTBE *				
1,1-Dichloroethane	98.96	4.10	3.37	82
Vinyl Acetate *				
2-Butanone *				
cis-1,2-DCE	96.94	4.02	3.41	85
Bromochloromethane *				
Chloroform	119.38	4.95	3.92	79
2,2-Dichloropropane *				
1,2-DCA	98.96	4.10	3.33	81
1,1,1-Trichloroethane	133.41	5.53	4.69	85
1,1-Dichloropropene *				
Carbon Tetrachloride	153.82	6.37	5.34	84
Benzene	78.11	3.24	2.68	83
Dibromomethane *				
1,2-Dichloropropane	112.99	4.68	3.9	83
Trichloroethene	131.39	5.44	4.59	84
Bromodichloromethane *				
2-CEVE *				
cis-1,3-Dichloropropene	110.97	4.60	3.55	77
4-Methyl-2-Pentanone *				
trans-1,3-Dichloropropene	110.97	4.60	3.53	77
1,1,2-Trichloroethane	133.41	5.53	4.56	82
Toluene	92.14	3.82	3.16	83
1,3-Dichloropropane *				

2-Hexanone *				
Dibromochloromethane *	187.86	7.78	6.53	84
<b>1,2-Dibromoethane</b>	<b>165.83</b>	<b>6.87</b>	<b>5.59</b>	<b>81</b>
<b>Tetrachloroethene</b>				
1,1,1,2-Tetrachloroethane *	112.56	4.66	3.59	77
<b>Chlorobenzene</b>	<b>106.16</b>	<b>4.40</b>	<b>3.45</b>	<b>78</b>
<b>Ethylbenzene</b>	<b>212.36</b>	<b>8.80</b>	<b>6.85</b>	<b>78</b>
<b>m,p-Xylenes</b>	<b>104.16</b>	<b>4.31</b>	<b>3.37</b>	<b>78</b>
<b>Styrene</b>	<b>106.18</b>	<b>4.40</b>	<b>3.51</b>	<b>80</b>
<b>o-Xylene</b>				
<b>1,1,2,2-Tetrachloroethane</b>	<b>133.41</b>	<b>5.53</b>	<b>5.91</b>	<b>107</b>
1,2,3-Trichloropropane *				
Isopropylbenzene *				
Bromobenzene *				
n-Propylbenzene *				
2-Chlorotoluene *				
4-Chlorotoluene *	120.19	4.98	4.09	82
<b>1,3,5-Trimethylbenzene</b>				
tert-butylbenzene *	120.19	4.98	4.11	83
<b>1,2,4-Trimethylbenzene</b>				
sec-butylbenzene *	147	6.09	4.85	80
<b>1,3-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.73</b>	<b>78</b>
<b>1,4-Dichlorobenzene</b>				
p-Isopropyltoluene *	147	6.09	5.01	82
<b>1,2-Dichlorobenzene</b>				
n-Butylbenzene *				
1,2-Dibromo-3-chloropropane *	181.46	7.52	5.44	72
<b>1,2,4-Trichlorobenzene</b>				
Naphthalene *	260.76	10.80	8.7	81
<b>Hexachlorobutadiene</b>				
1,2,3-Trichlorobenzene *				

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
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1) Pentafluorobenzene	10.61	168	201057	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.74	114	351105	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	292717	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	134120	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.10	113	108706	21.49	ug/L	0.00
Spiked Amount 25.000			Recovery	= 85.96%		
39) Toluene-d8	14.12	98	384321	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery	= 86.80%		
53) 4-Bromofluorobenzene	17.76	95	132578	20.67	ug/L	0.00
Spiked Amount 25.000			Recovery	= 82.68%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	57530	6.06	ug/L	95
3) Chloromethane	4.90	50	33468	2.13	ug/L	98
4) Vinyl chloride	5.19	62	34821	2.49	ug/L	96
5) Bromomethane	5.78	94	12125	1.91	ug/L	94
6) Chloroethane	5.99	64	18973	2.56	ug/L	90
7) Trichlorofluoromethane	6.79	101	58222	5.99	ug/L	100
8) Acetone	6.94	43	1602	Below Cal	#	85
9) Iodomethane	7.57	142	6053	1.47	ug/L	91
10) 1,1-Dichloroethene	7.52	96	20124	3.55	ug/L	97
11) Methylene chloride	7.72	84	22344	3.35	ug/L	90
12) Freon 113	7.78	101	41757	6.22	ug/L	97
13) Carbon disulfide	8.03	76	10613	0.53	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	558	0.09	ug/L	60
15) MTBE	8.75	73	153	0.01	ug/L	50
16) 1,1-Dichloroethane	8.93	63	44110	3.37	ug/L	99
17) Vinyl acetate	9.09	43	405	0.04	ug/L	83
18) 2-Butanone (MEK)	9.66	72	117	1.25	ug/L	1
19) cis-1,2-Dichloroethene	9.67	96	22148	3.41	ug/L	96
20) Bromochloromethane	0.00	128	0	N.D.		
21) Chloroform	9.94	83	42350	3.92	ug/L	98
22) 2,2-Dichloropropane	0.00	77	0	N.D.		
24) 1,2-Dichloroethane	10.78	62	21923	3.33	ug/L	96
25) 1,1,1-Trichloroethane	10.92	97	36411	4.69	ug/L	98
27) 1,1-Dichloropropene	0.00	75	0	N.D.		
28) Carbon tetrachloride	11.40	117	33155	5.34	ug/L	97
29) Benzene	11.45	78	64449	2.68	ug/L	98
30) Dibromomethane	0.00	93	0	N.D.		
31) 1,2-Dichloropropane	12.22	63	26155	3.90	ug/L	99
32) Trichloroethene	12.28	95	27561	4.59	ug/L	97
33) Bromodichloromethane	12.29	83	154	0.02	ug/L	25
34) 2-Chlorovinylethylether	0.00	63	0	N.D.		
35) cis-1,3-Dichloropropene	13.17	75	30363	3.55	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.33	43	274	0.08	ug/L	50
37) trans-1,3-Dichloropropene	13.74	75	23347	3.53	ug/L	98
38) 1,1,2-Trichloroethane	13.96	83	14497	4.56	ug/L	99
40) Toluene	14.22	92	43103	3.16	ug/L	96
42) 1,3-Dichloropropane	14.21	76	285	0.04	ug/L	44

(#) = qualifier out of range (m) = manual integration  
 03171116.D 031711.M Thu Mar 17 14:49:25 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	136	0.06	ug/L #	29
44) Dibromochloromethane	0.00	129	0	N.D.		
45) 1,2-Dibromoethane	14.99	107	21706	6.53	ug/L	99
46) Tetrachloroethene	15.21	166	29329	5.59	ug/L	99
47) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
48) Chlorobenzene	16.12	112	49412	3.59	ug/L	98
49) Ethylbenzene	16.38	91	89509	3.45	ug/L	99
50) m,p-Xylenes	16.64	106	62191	6.85	ug/L	100
51) Styrene	17.10	104	46398	3.37	ug/L	97
52) o-Xylene	17.19	106	30948	3.51	ug/L	97
55) Bromoform	0.00	173	0	N.D.		
56) 1,1,2,2-Tetrachloroethane	17.19	83	23190	5.91	ug/L	95
57) 1,2,3-Trichloropropane	0.00	110	0	N.D.		
58) Isopropylbenzene	17.70	105	1070	0.05	ug/L #	51
59) Bromobenzene	18.06	156	141	0.03	ug/L #	43
60) n-Propylbenzene	18.32	91	1826	0.06	ug/L #	90
61) 2-Chlorotoluene	18.45	91	787	0.05	ug/L #	44
62) 4-Chlorotoluene	18.56	91	1213	0.07	ug/L #	65
63) 1,3,5-Trimethylbenzene	18.71	105	72087	4.06	ug/L	98
64) tert-Butylbenzene	19.09	119	908	0.06	ug/L #	76
65) 1,2,4-Trimethylbenzene	19.24	105	73403	4.11	ug/L	99
66) sec-Butylbenzene	19.24	105	73403	2.83	ug/L #	61
67) 1,3-Dichlorobenzene	19.49	146	46821	4.85	ug/L	100
68) 1,4-Dichlorobenzene	19.58	146	46004	4.73	ug/L	97
69) p-Isopropyltoluene	19.62	119	1222	0.06	ug/L #	89
70) 1,2-Dichlorobenzene	20.02	146	42108	5.01	ug/L	98
71) n-Butylbenzene	20.13	91	3423	0.16	ug/L	97
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.		
73) 1,2,4-Trichlorobenzene	22.29	180	29509	5.44	ug/L	99
74) Naphthalene	22.63	128	15881	2.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	30129	8.70	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	2346	0.53	ug/L	95

(#) = qualifier out of range (m) = manual integration  
 03171116.D 031711.M Thu Mar 17 14:49:25 2011

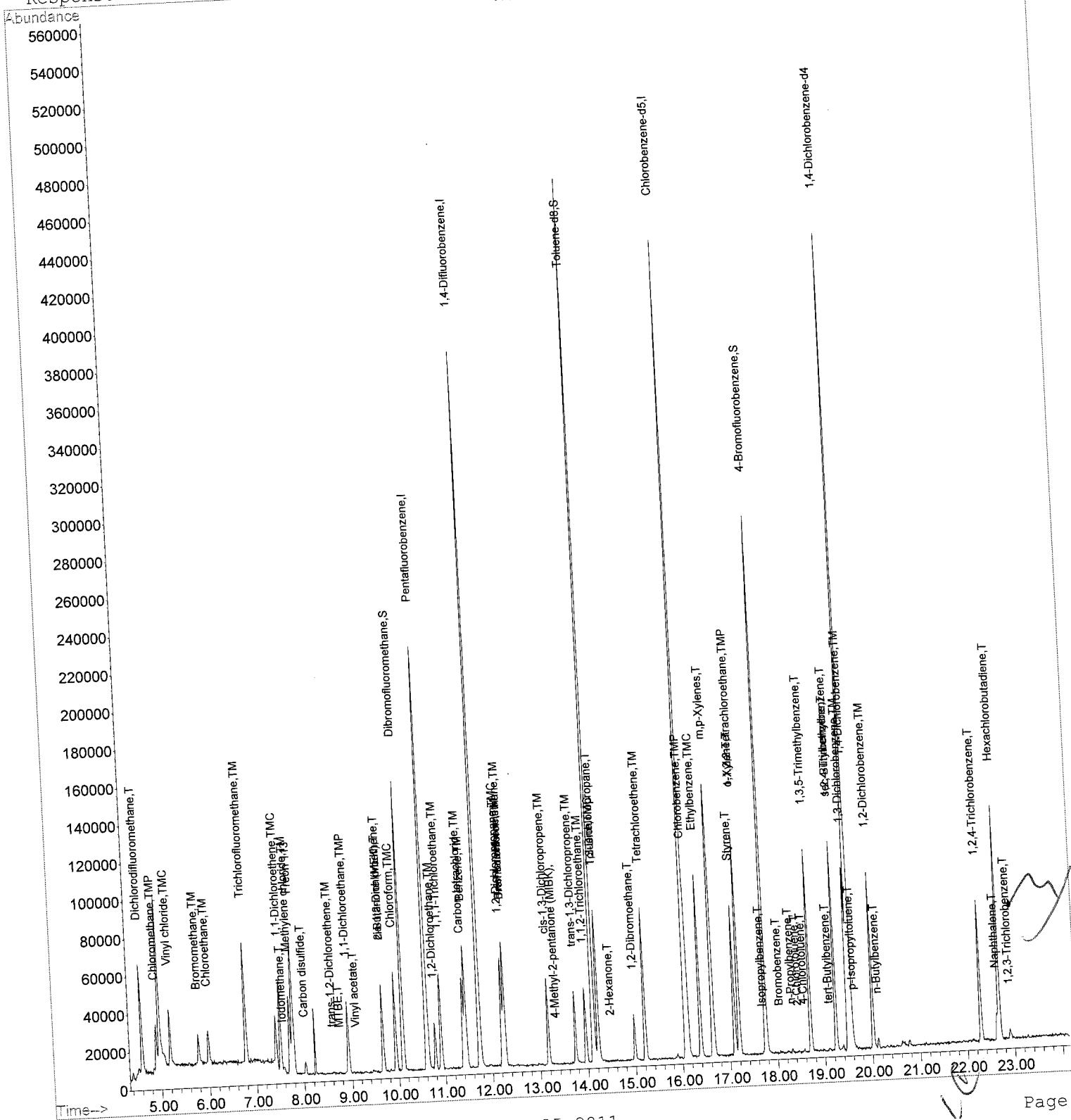
Page

96 of 285

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
Acq On : 17 Mar 2011 2:20 pm Operator: LC  
Sample : TERTIARY GAS Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 17 14:48 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RT6 Integration)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171116.D 031711.M

Thu Mar 17 14:49:25 2011

97 of 285

Page

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:36 2011

Re/Cal ✓  
 Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	110687	22.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.84%		
39) Toluene-d8	14.11	98	374753	21.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.84%		
53) 4-Bromofluorobenzene	17.75	95	131653	21.33	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.32%		
<b>Target Compounds</b>						
3) Chloromethane	4.89	50	1791	0.12	ug/L	LPL 98
5) Bromomethane	5.77	94	123	0.28	ug/L	# 76
8) Acetone	6.93	43	3328	Below Cal	#	67
13) Carbon disulfide	8.02	76	5282	0.27	ug/L	100
17) Vinyl acetate	9.19	43	944	0.10	ug/L	# 83
24) 1,2-Dichloroethane	10.60	62	1206	0.19	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11	ug/L	# W2T 68
42) 1,3-Dichloropropane	14.12	76	3863	0.61	ug/L	# W2T 29
43) 2-Hexanone	14.46	43	235	0.11	ug/L	# LPL 100
74) Naphthalene	22.63	128	1667	0.24	ug/L	1

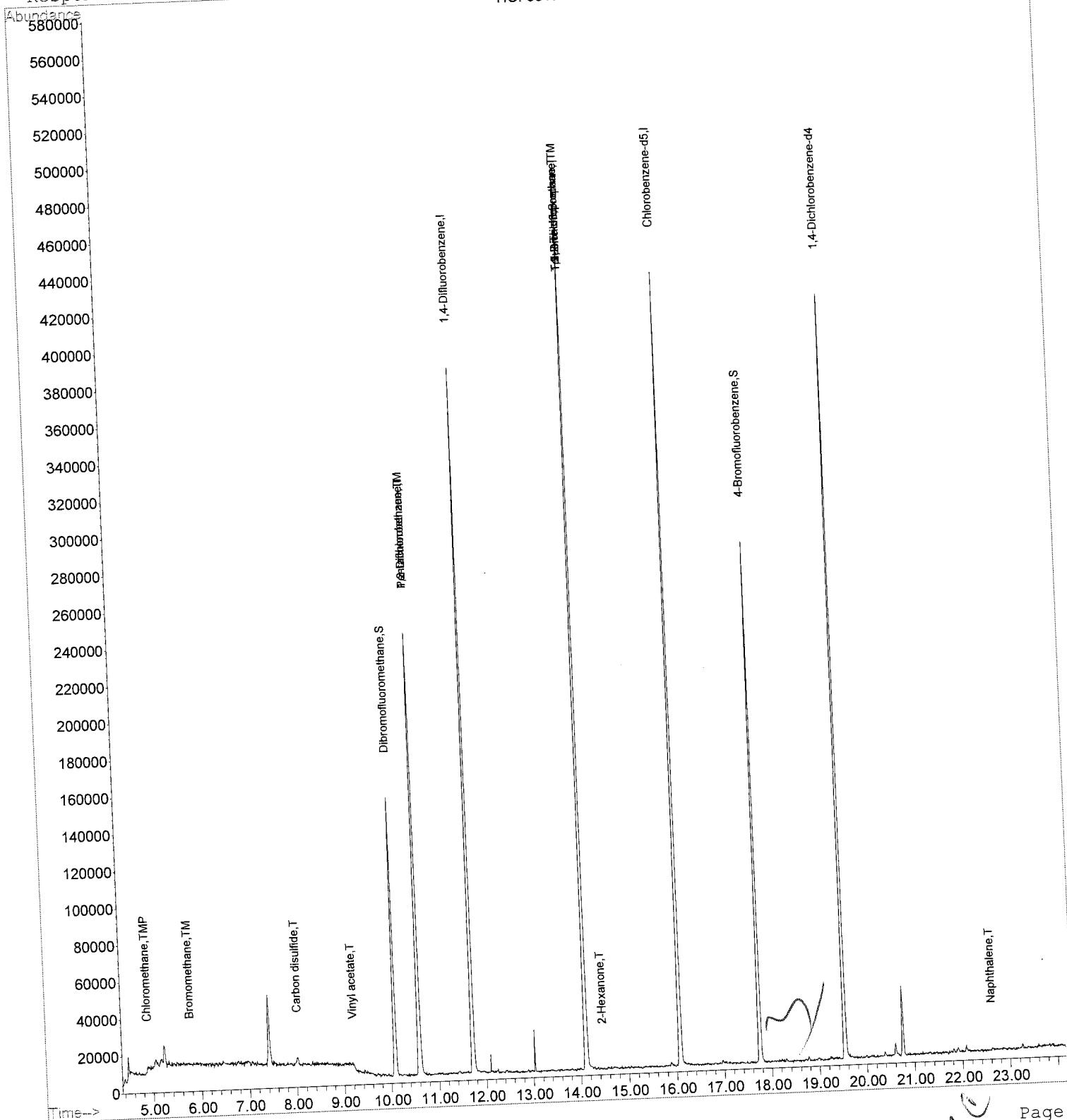
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 03171105.D 031711.M Fri Mar 18 08:36:53 2011

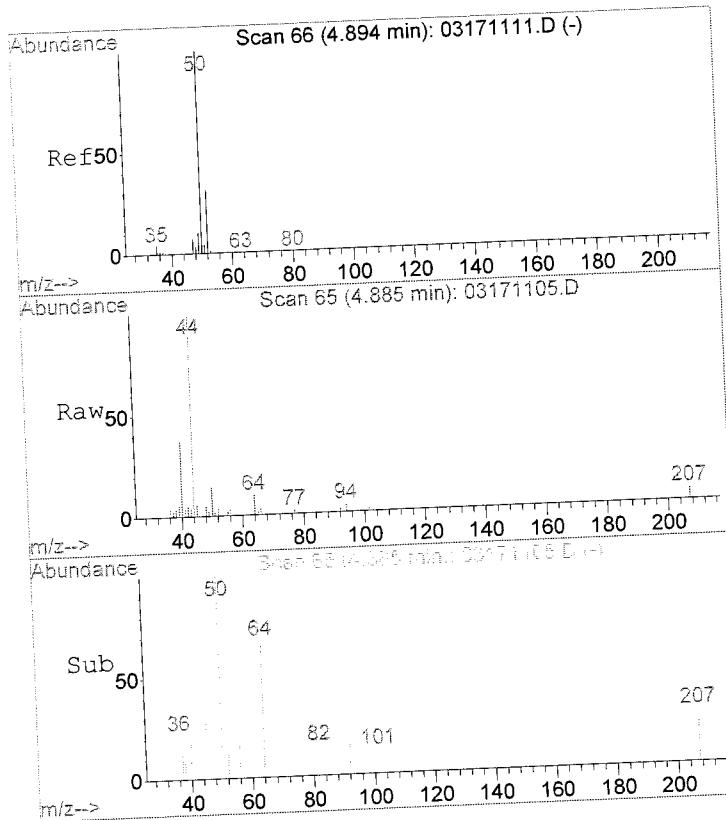
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D      Vial: 2  
 Acq On : 17 Mar 2011 8:41 am      Operator: LC  
 Sample : BLANK      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011      Quant Results File: 031711.RES  
 Response via : Initial Calibration

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

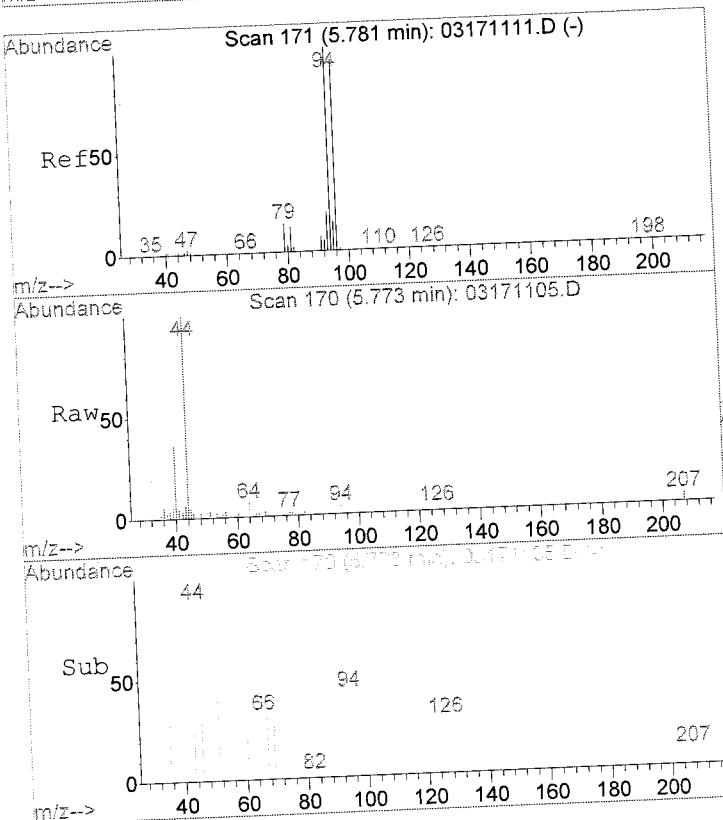
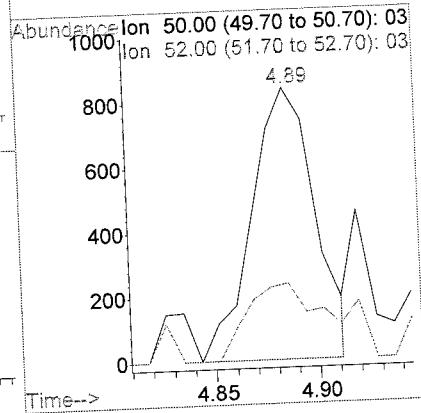
TIC: 03171105.D





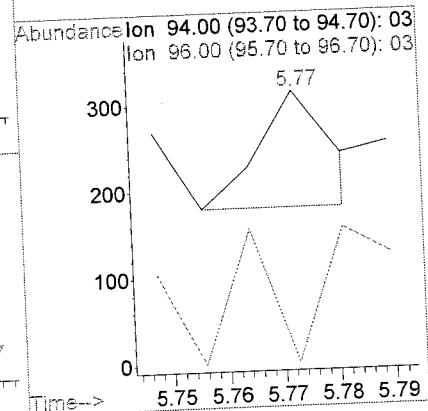
#3  
 Chloromethane  
 Concen: 0.12 ug/L  
 RT: 4.89 min Scan# 65  
 Delta R.T. -0.01 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 50 Resp: 1791  
 Ion Ratio Lower Upper  
 50 100  
 52 32.7 25.1 37.7



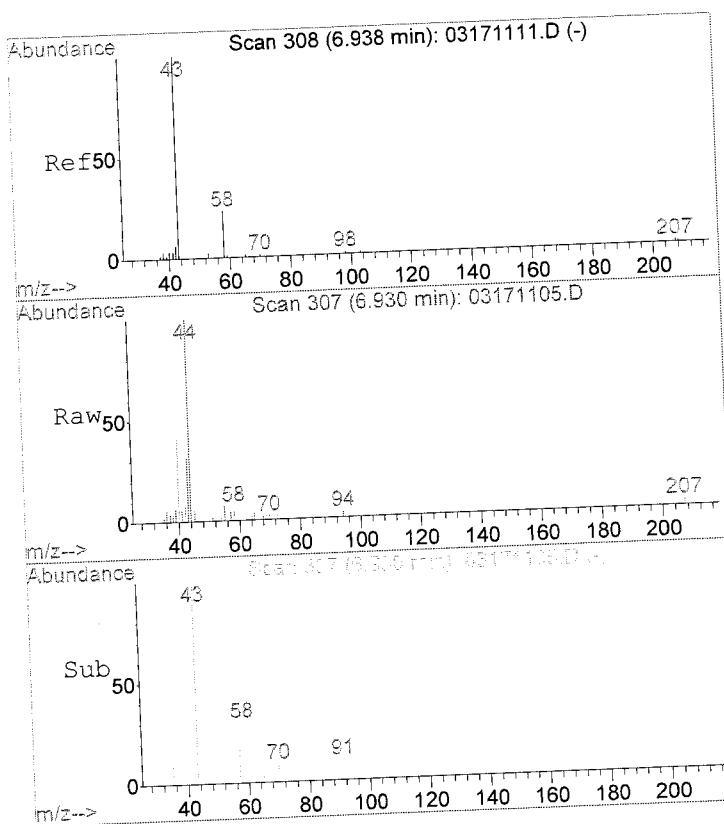
#5  
 Bromomethane  
 Concen: 0.28 ug/L  
 RT: 5.77 min Scan# 170  
 Delta R.T. -0.01 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 94 Resp: 123  
 Ion Ratio Lower Upper  
 94 100  
 96 115.4 74.0 111.0#



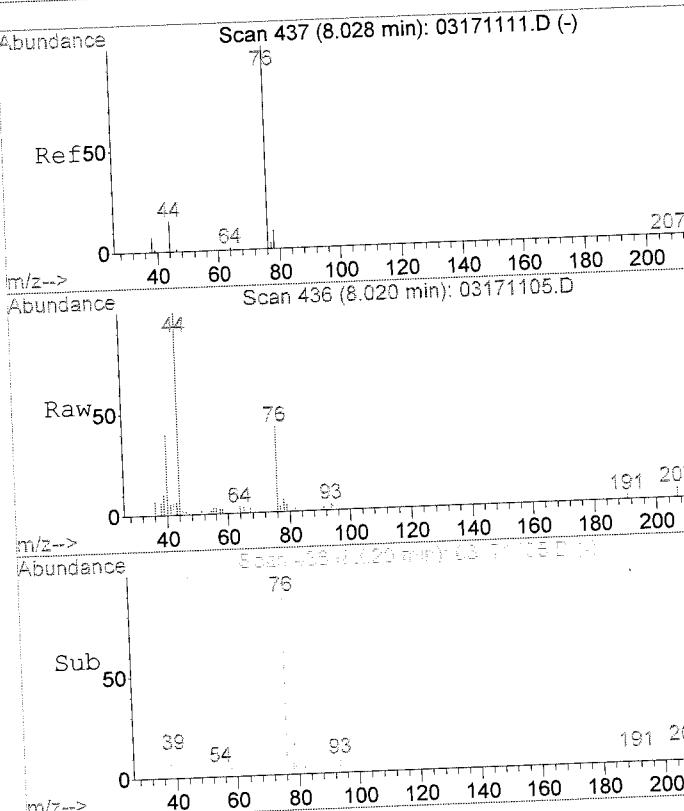
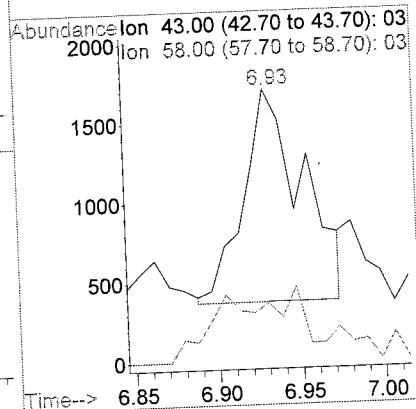
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Page



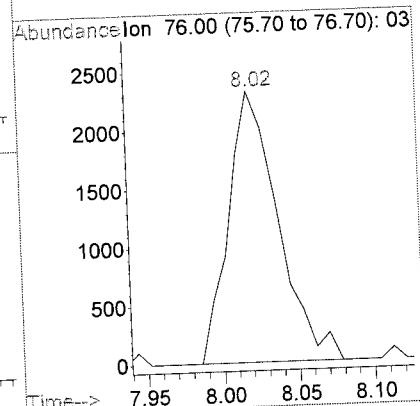
#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 307  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

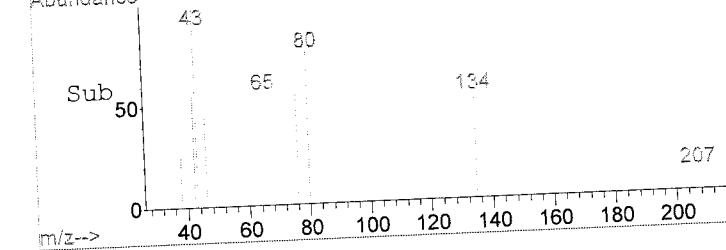
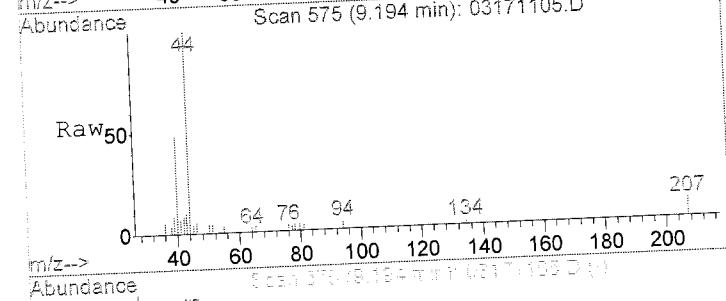
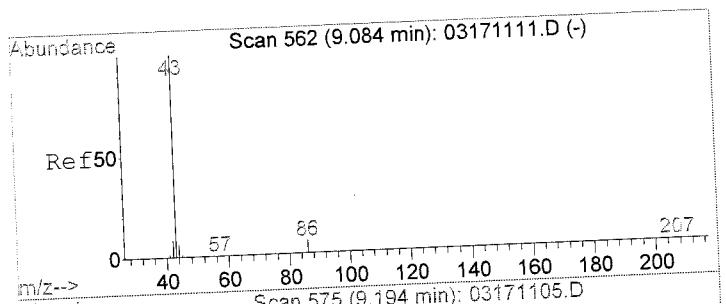
Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 21.2 31.8#



#13  
Carbon disulfide  
Concen: 0.27 ug/L  
RT: 8.02 min Scan# 436  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

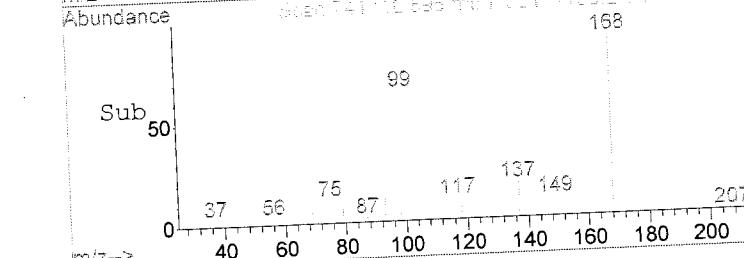
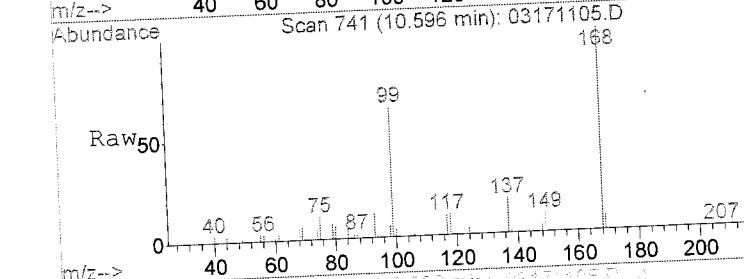
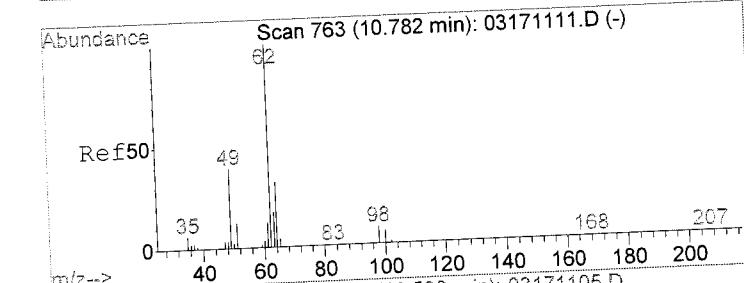
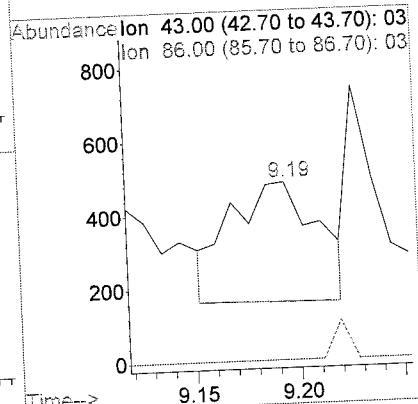
Tgt Ion: 76 Resp: 5282





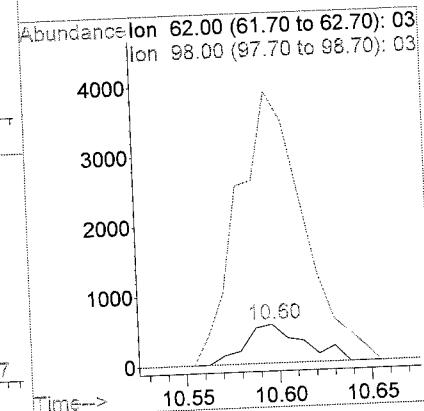
#17  
 Vinyl acetate  
 Concen: 0.10 ug/L  
 RT: 9.19 min Scan# 575  
 Delta R.T. 0.11 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

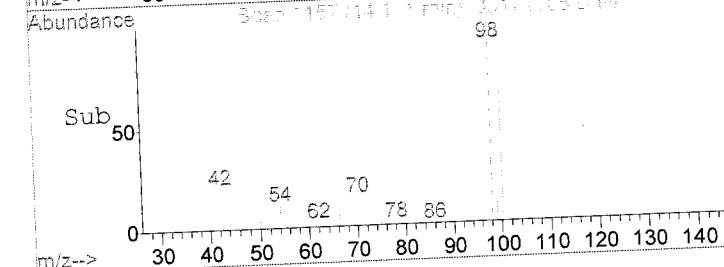
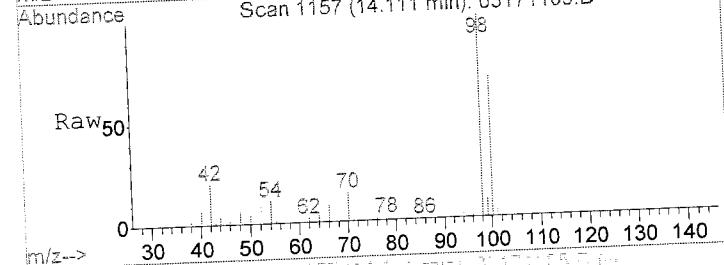
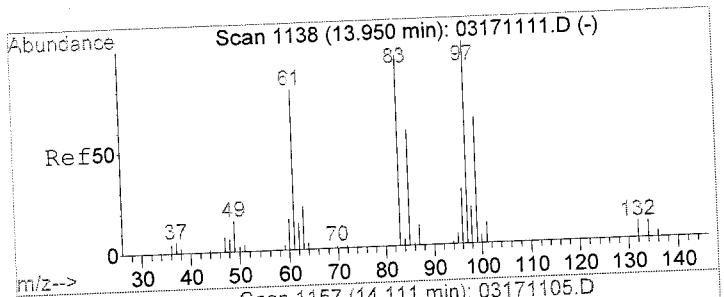
Tgt Ion: 43 Resp: 944  
 Ion Ratio Lower Upper  
 43 100  
 86 0.0 4.6 6.8#



#24  
 1,2-Dichloroethane  
 Concen: 0.19 ug/L  
 RT: 10.60 min Scan# 741  
 Delta R.T. -0.19 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

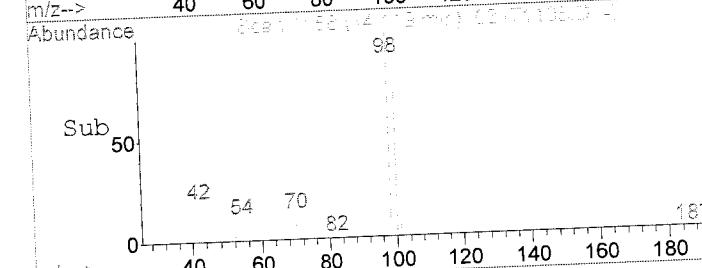
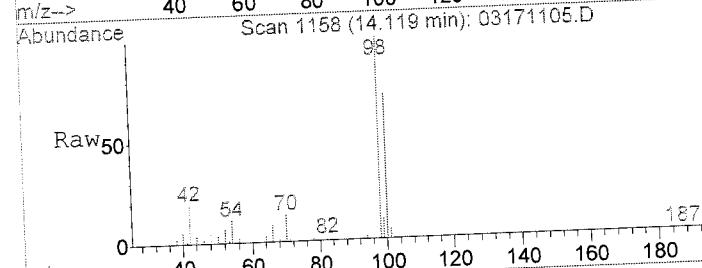
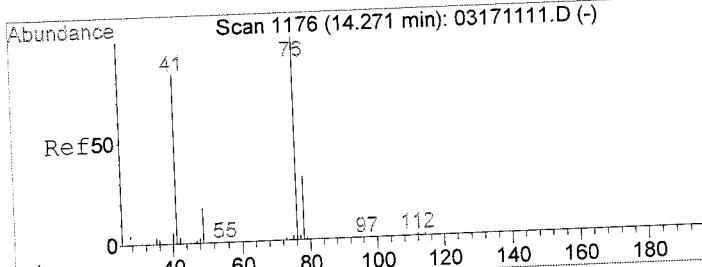
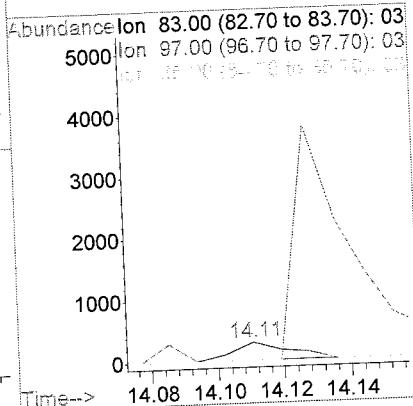
Tgt Ion: 62 Resp: 1206  
 Ion Ratio Lower Upper  
 62 100  
 98 791.2 7.0 10.6#





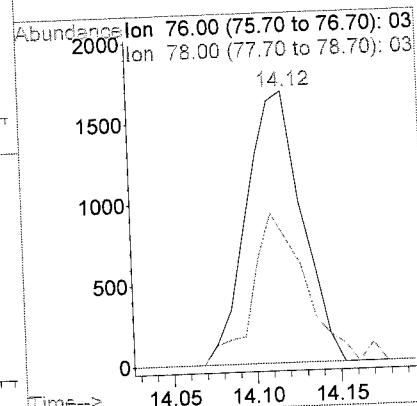
#38  
 1,1,2-Trichloroethane  
 Concen: 0.11 ug/L  
 RT: 14.11 min Scan# 1157  
 Delta R.T. 0.16 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

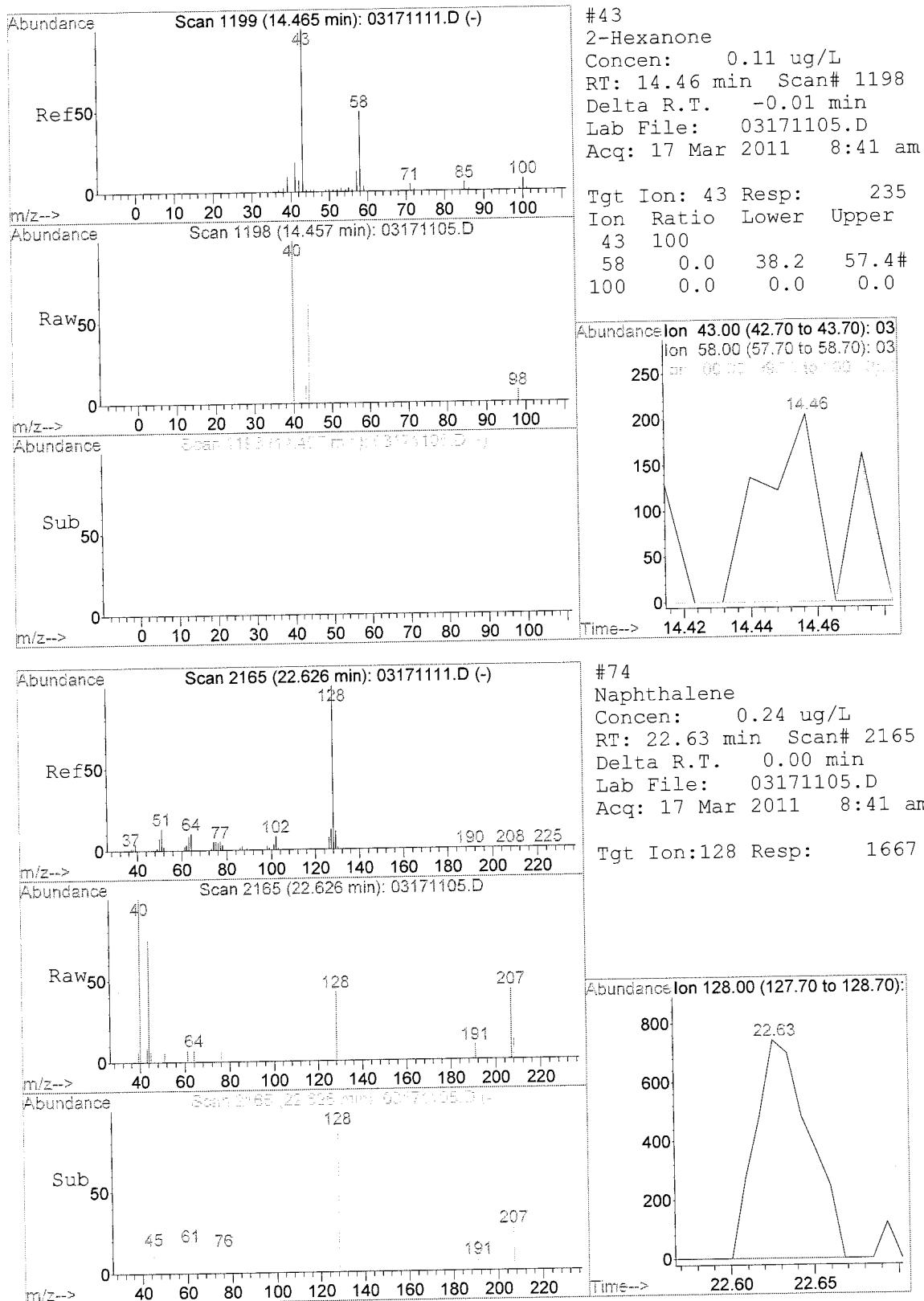
Tgt Ion: 83 Resp: 345  
 Ion Ratio Lower Upper  
 83 100  
 97 1295.7 83.0 124.6#  
 85 0.0 51.3 76.9#



#42  
 1,3-Dichloropropane  
 Concen: 0.61 ug/L  
 RT: 14.12 min Scan# 1158  
 Delta R.T. -0.15 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 76 Resp: 3863  
 Ion Ratio Lower Upper  
 76 100  
 78 48.4 24.6 37.0#





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
Acq On : 17 Mar 2011 9:12 am Operator: LC  
Sample : 0.5 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:36 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Results File: 031711.RES

Quant Method : C:\HRCHEM\1.1\...  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration  
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	2490	0.59	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.36%	
39) Toluene-d8	14.12	98	8971	0.60	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.40%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.61	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.44%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	4286	0.54	ug/L	# 90
3) Chloromethane	4.89	50	6587	0.50	ug/L	95
4) Vinyl chloride	5.18	62	6003	0.51	ug/L	90
5) Bromomethane	5.78	94	3084	0.76	ug/L	93
6) Chloroethane	5.97	64	3371	0.55	ug/L	# 73
7) Trichlorofluoromethane	6.77	101	4364	0.54	ug/L	92
8) Acetone	6.93	43	1615	Below Cal	# 66	
9) Iodomethane	7.58	142	1272	0.47	ug/L	92
10) 1,1-Dichloroethene	7.50	96	2883	0.61	ug/L	93
11) Methylene chloride	7.70	84	3890	0.70	ug/L	97
12) Freon 113	7.77	101	3509	0.63	ug/L	92
13) Carbon disulfide	8.02	76	10027	0.60	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 92
15) MTBE	8.73	73	5033	0.56	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.54	ug/L	96
17) Vinyl acetate	9.08	43	4816	0.57	ug/L	# 83
18) 2-Butanone (MEK)	9.46	72	199	1.62	ug/L	# 34
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	90
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 93
21) Chloroform	9.93	83	4941	0.55	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.53	ug/L	100
24) 1,2-Dichloroethane	10.77	62	2927	0.53	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.51	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	95
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.54	ug/L	99
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 87
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	# 97
32) Trichloroethene	12.27	95	2709	0.53	ug/L	98
33) Bromodichloromethane	12.33	83	3018	0.50	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	Below Cal	# 55	
35) cis-1,3-Dichloropropene	13.18	75	3500	0.48	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	2046	0.69	ug/L	# 82
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.51	ug/L	84
40) Toluene	14.21	92	6374	0.55	ug/L	96
42) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	96

(#) = qualifier out of range (m) = manual integration  
03171106.D 031711.M Fri Mar 18 08:37:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Dibromochloromethane	14.65	129	2052	0.62	ug/L	85
45) 1,2-Dibromoethane	14.98	107	1293	0.47	ug/L #	78
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.57	ug/L #	53
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.55	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.59	ug/L	95
51) Styrene	17.10	104	5086	0.44	ug/L #	78
52) o-Xylene	17.20	106	4214	0.57	ug/L	96
55) Bromoform	16.81	173	696	0.41	ug/L #	64
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L #	93
57) 1,2,3-Trichloropropane	17.38	110	276	0.37	ug/L #	62
58) Isopropylbenzene	17.70	105	9284	0.52	ug/L	99
59) Bromobenzene	18.05	156	1904	0.46	ug/L	83
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	97
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.53	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.51	ug/L	96
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.52	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L #	87
69) p-Isopropyltoluene	19.61	119	8395	0.49	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.54	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.50	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	71	0.16	ug/L #	14
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.46	ug/L	81
74) Naphthalene	22.63	128	4307	0.69	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	0.48	ug/L #	65
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.51	ug/L	87

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031711.M Fri Mar 18 08:37:04 2011

M  
JC

Quantitation Report

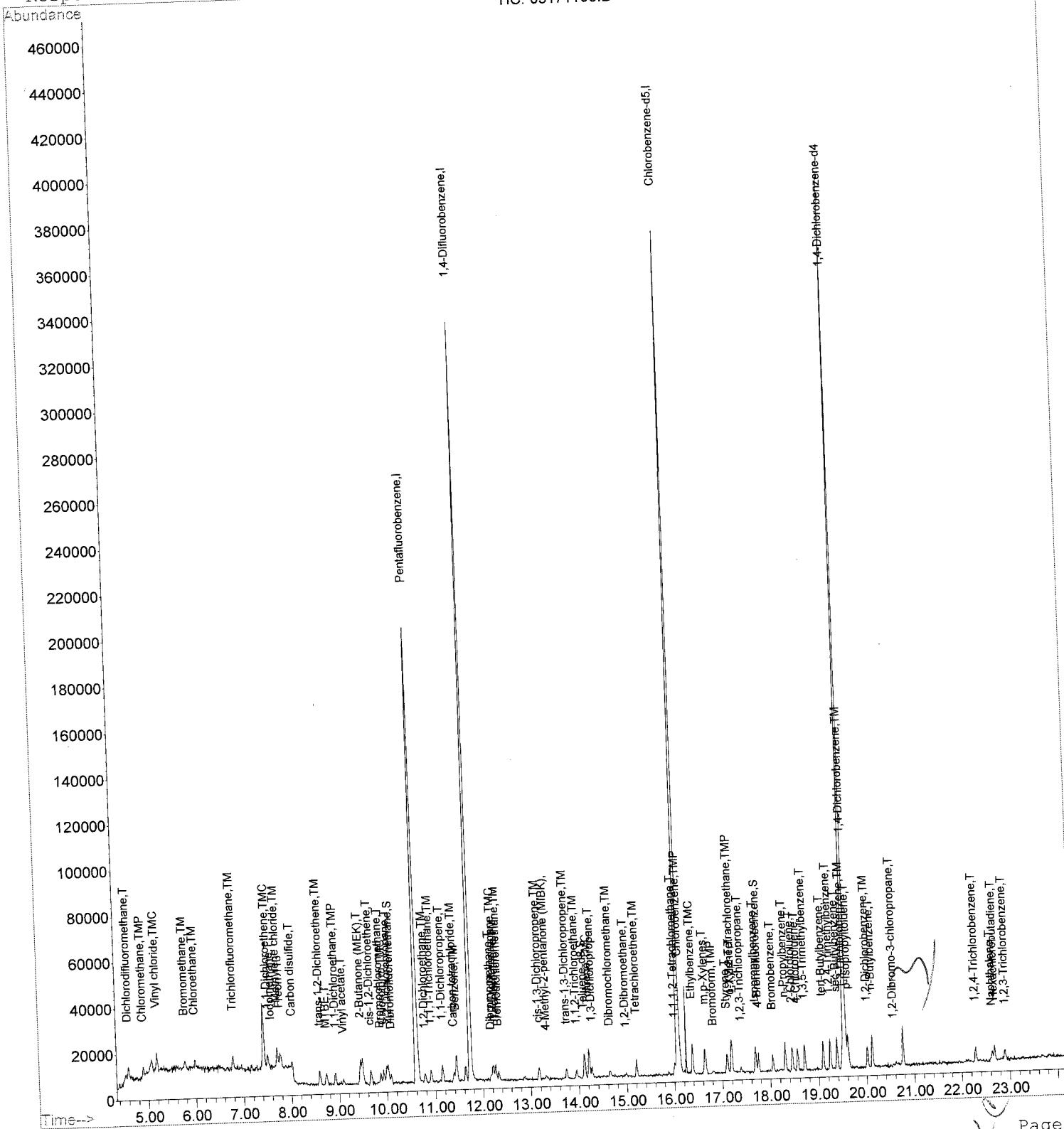
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D  
 Acq On : 17 Mar 2011 9:12 am  
 Sample : 0.5 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011

Vial: 3  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171106.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	3898	0.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	3.76%	
39) Toluene-d8	14.12	98	14880	1.01	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.04%	
53) 4-Bromofluorobenzene	17.76	95	5477	1.03	ug/L	0.00
Spiked Amount 25.000			Recovery	=	4.12%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.58	85	7417	0.96	ug/L	94
3) Chloromethane	4.89	50	11297	0.88	ug/L	99
4) Vinyl chloride	5.18	62	11731	1.03	ug/L	# 84
5) Bromomethane	5.77	94	5200	1.12	ug/L	94
6) Chloroethane	5.98	64	6815	1.13	ug/L	# 88
7) Trichlorofluoromethane	6.77	101	8152	1.03	ug/L	91
8) Acetone	6.93	43	2180	Below Cal		96
9) Iodomethane	7.57	142	3864	1.18	ug/L	# 86
10) 1,1-Dichloroethene	7.51	96	5486	1.19	ug/L	97
11) Methylene chloride	7.70	84	6767	1.24	ug/L	92
12) Freon 113	7.78	101	6284	1.15	ug/L	98
13) Carbon disulfide	8.02	76	17829	1.08	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.19	ug/L	85
15) MTBE	8.73	73	10605	1.21	ug/L	# 88
16) 1,1-Dichloroethane	8.92	63	12255	1.15	ug/L	# 97
17) Vinyl acetate	9.09	43	9903	1.19	ug/L	# 93
18) 2-Butanone (MEK)	9.48	72	190	1.60	ug/L	# 1
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L	96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L	97
21) Chloroform	9.93	83	8465	0.96	ug/L	99
22) 2,2-Dichloropropane	10.03	77	6968	0.98	ug/L	# 90
24) 1,2-Dichloroethane	10.78	62	5936	1.10	ug/L	# 76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.97	ug/L	# 56
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L	# 93
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L	98
29) Benzene	11.44	78	20409	1.02	ug/L	97
30) Dibromomethane	12.17	93	2529	1.07	ug/L	94
31) 1,2-Dichloropropane	12.21	63	5383	0.96	ug/L	# 90
32) Trichloroethene	12.26	95	4847	0.97	ug/L	95
33) Bromodichloromethane	12.32	83	5644	0.96	ug/L	# 87
34) 2-Chlorovinylethylether	12.86	63	1739	0.28	ug/L	# 80
35) cis-1,3-Dichloropropene	13.18	75	6952	0.98	ug/L	# 95
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.19	ug/L	# 89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.99	ug/L	# 84
40) Toluene	14.22	92	10459	0.92	ug/L	93
42) 1,3-Dichloropropane	14.27	76	5543	1.01	ug/L	# 75

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031711.M Fri Mar 18 08:37:19 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.37	ug/L	71
44) Dibromochloromethane	14.65	129	2863	0.86	ug/L	97
45) 1,2-Dibromoethane	14.98	107	2446	0.88	ug/L	77
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	94
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.00	ug/L	59
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	93
49) Ethylbenzene	16.38	91	20598	0.96	ug/L	98
50) m,p-Xylenes	16.64	106	6910	0.92	ug/L	93
51) Styrene	17.10	104	10355	0.90	ug/L	99
52) o-Xylene	17.20	106	7210	0.98	ug/L	87
55) Bromoform	16.81	173	1545	0.94	ug/L	76
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L	91
57) 1,2,3-Trichloropropane	17.38	110	807	1.12	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.94	ug/L	99
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.97	ug/L	100
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.95	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.97	ug/L	98
66) sec-Butylbenzene	19.38	105	21187	0.97	ug/L	93
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	99
69) p-Isopropyltoluene	19.61	119	15312	0.92	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.94	ug/L	96
71) n-Butylbenzene	20.11	91	17346	0.93	ug/L	94
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.89	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	4683	1.02	ug/L	100
74) Naphthalene	22.63	128	5978	0.99	ug/L	89
75) Hexachlorobutadiene	22.68	225	2850	0.98	ug/L	93
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.93	ug/L	

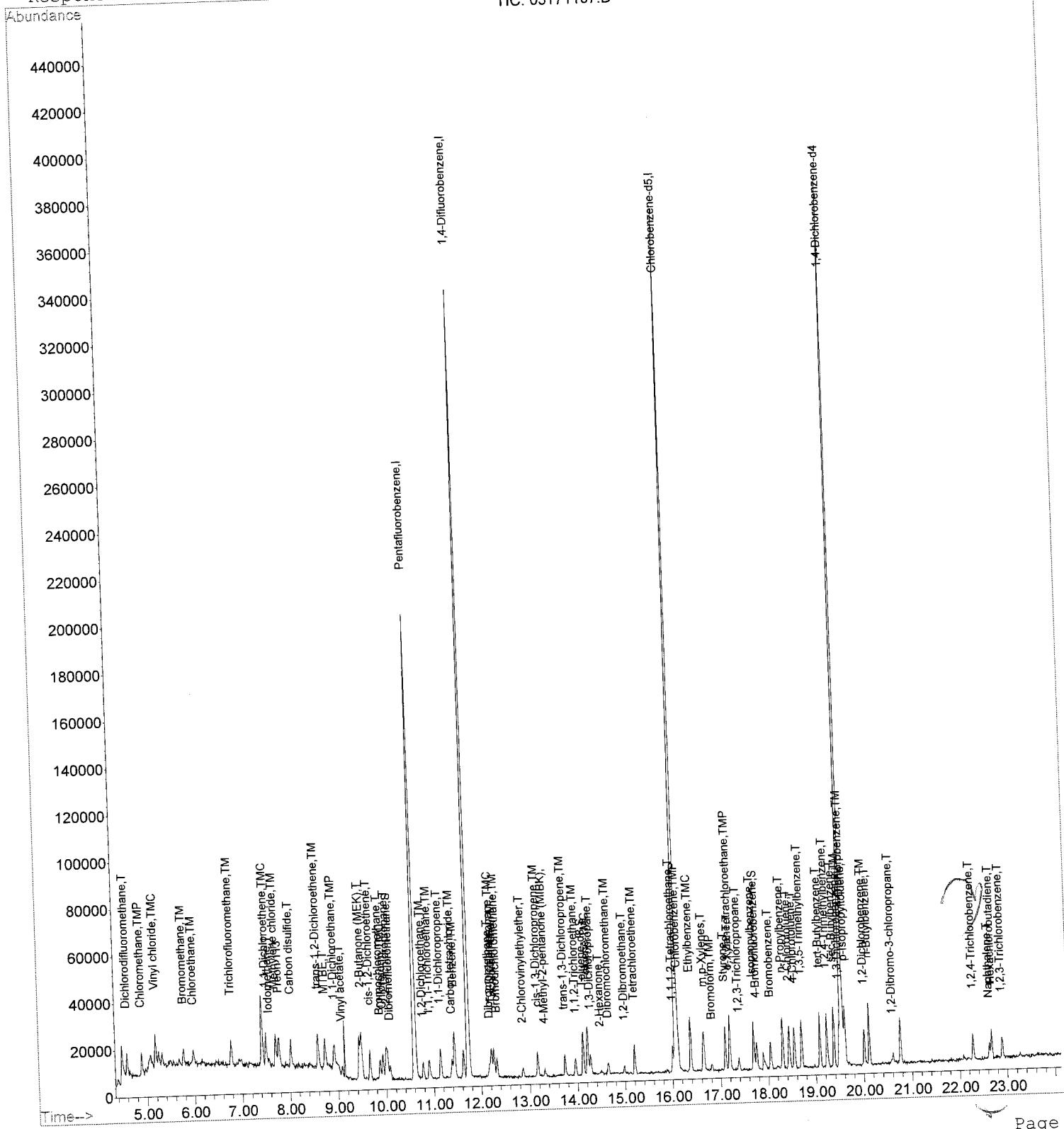
Page 2

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031711.M Fri Mar 18 08:37:19 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	7767	1.85	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.40%	
39) Toluene-d8	14.12	98	28802	1.93	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.72%	
53) 4-Bromofluorobenzene	17.75	95	10411	1.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.76%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	15723	1.99	ug/L	96
3) Chloromethane	4.89	50	22795	1.75	ug/L	97
4) Vinyl chloride	5.18	62	22297	1.92	ug/L	95
5) Bromomethane	5.77	94	6970	1.40	ug/L	99
6) Chloroethane	5.98	64	11754	1.91	ug/L	# 83
7) Trichlorofluoromethane	6.78	101	16143	2.00	ug/L	99
8) Acetone	6.94	43	4997	1.82	ug/L	99
9) Iodomethane	7.57	142	5343	1.55	ug/L	93
10) 1,1-Dichloroethene	7.51	96	8308	1.76	ug/L	96
11) Methylene chloride	7.71	84	10726	1.93	ug/L	98
12) Freon 113	7.77	101	10221	1.83	ug/L	98
13) Carbon disulfide	8.03	76	30243	1.80	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	9562	1.83	ug/L	97
15) MTBE	8.73	73	16615	1.86	ug/L	96
16) 1,1-Dichloroethane	8.92	63	20516	1.89	ug/L	98
17) Vinyl acetate	9.08	43	14566	1.72	ug/L	# 95
18) 2-Butanone (MEK)	9.47	72	179	1.55	ug/L	# 1
19) cis-1,2-Dichloroethene	9.67	96	10907	2.02	ug/L	92
20) Bromochloromethane	9.88	128	3627	1.84	ug/L	95
21) Chloroform	9.93	83	18162	2.02	ug/L	95
22) 2,2-Dichloropropane	10.04	77	14030	1.93	ug/L	98
24) 1,2-Dichloroethane	10.78	62	10721	1.96	ug/L	# 93
25) 1,1,1-Trichloroethane	10.91	97	12034	1.87	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	98
28) Carbon tetrachloride	11.38	117	9830	1.88	ug/L	94
29) Benzene	11.44	78	39494	1.95	ug/L	100
30) Dibromomethane	12.17	93	4597	1.92	ug/L	92
31) 1,2-Dichloropropane	12.22	63	10960	1.93	ug/L	# 96
32) Trichloroethene	12.27	95	9761	1.92	ug/L	96
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	# 96
34) 2-Chlorovinylethylether	12.87	63	2637	1.16	ug/L	# 83
35) cis-1,3-Dichloropropene	13.16	75	13465	1.86	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.79	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.86	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.95	ug/L	96
40) Toluene	14.21	92	22811	1.98	ug/L	95
42) 1,3-Dichloropropane	14.28	76	10418	1.88	ug/L	90

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031711.M Fri Mar 18 08:37:34 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2474	1.34	ug/L	# 88
44) Dibromochloromethane	14.65	129	6238	1.88	ug/L	98
45) 1,2-Dibromoethane	14.99	107	5443	1.96	ug/L	# 98
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.88	ug/L	92
48) Chlorobenzene	16.12	112	21803	1.90	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.88	ug/L	100
50) m,p-Xylenes	16.64	106	14567	1.92	ug/L	98
51) Styrene	17.09	104	21955	1.91	ug/L	99
52) o-Xylene	17.19	106	14080	1.91	ug/L	99
55) Bromoform	16.81	173	2978	1.82	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	93
57) 1,2,3-Trichloropropane	17.40	110	1450	2.02	ug/L	94
58) Isopropylbenzene	17.69	105	34246	1.98	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	96
60) n-Propylbenzene	18.30	91	47531	1.93	ug/L	98
61) 2-Chlorotoluene	18.44	91	27642	1.91	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	97
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.91	ug/L	95
64) tert-Butylbenzene	19.09	119	24316	1.91	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.96	ug/L	97
66) sec-Butylbenzene	19.38	105	43119	1.98	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	16064	1.98	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	99
69) p-Isopropyltoluene	19.61	119	32053	1.93	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	13744	1.95	ug/L	97
71) n-Butylbenzene	20.12	91	35106	1.90	ug/L	79
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.21	ug/L	# 96
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.83	ug/L	100
74) Naphthalene	22.63	128	10824	1.79	ug/L	99
75) Hexachlorobutadiene	22.68	225	5711	1.96	ug/L	94
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.89	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031711.M Fri Mar 18 08:37:34 2011

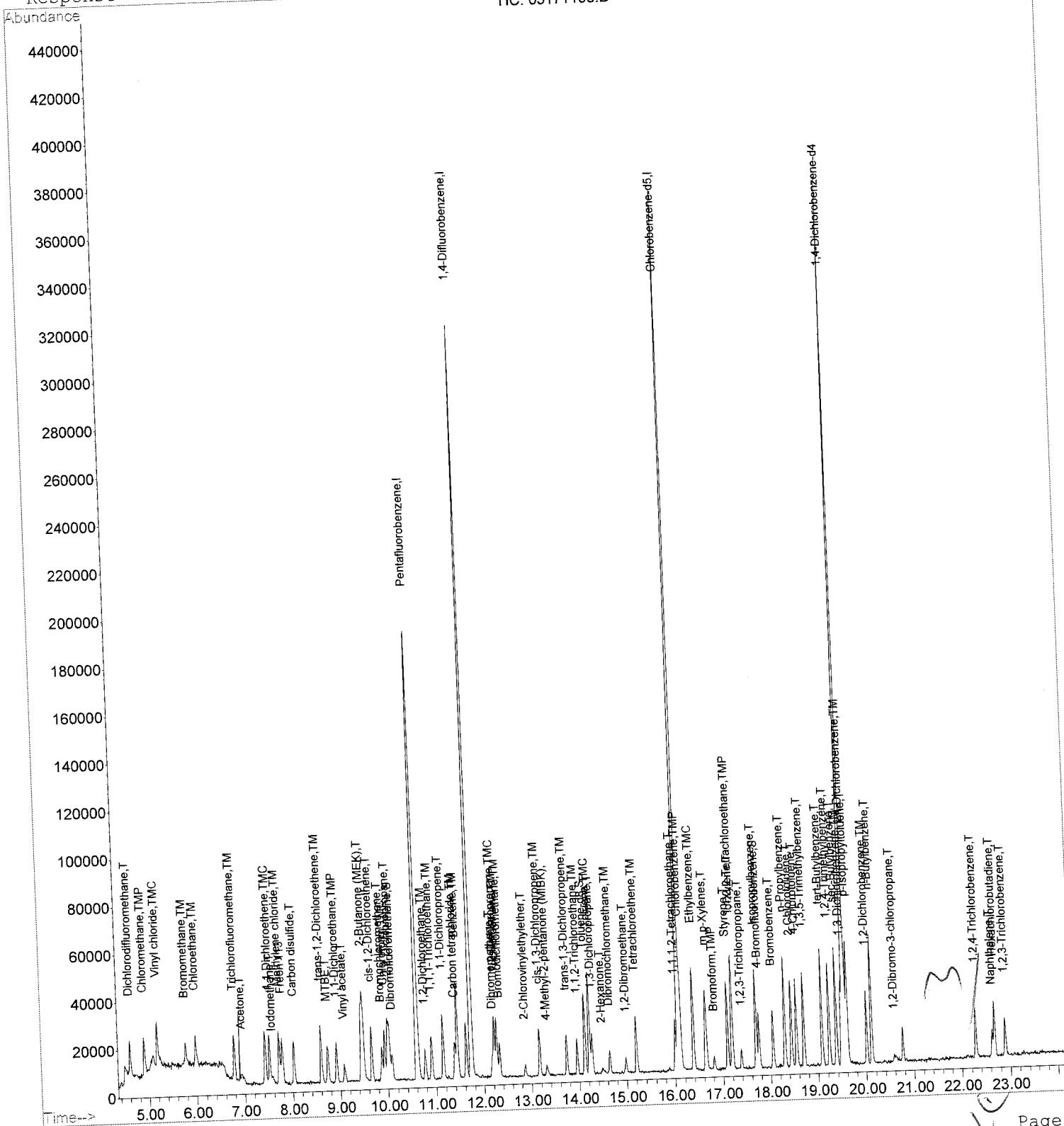


 Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
Acq On : 17 Mar 2011 10:14 am Operator: LC  
Sample : 2.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\U31\11.M (RTF Integration)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



03171108.D 031711.M

Fri Mar 18 08:37:35 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	22772	5.52	ug/L	0.00
Spiked Amount 25.000			Recovery	=	22.08%	
39) Toluene-d8	14.12	98	75601	5.05	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.20%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.10	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.40%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	43993	5.68	ug/L	96
3) Chloromethane	4.90	50	69304	5.42	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.23	ug/L	97
5) Bromomethane	5.77	94	23286	4.14	ug/L	93
6) Chloroethane	5.98	64	31380	5.20	ug/L	95
7) Trichlorofluoromethane	6.78	101	44900	5.67	ug/L	97
8) Acetone	6.94	43	8551	6.12	ug/L	98
9) Iodomethane	7.57	142	19144	5.33	ug/L	97
10) 1,1-Dichloroethene	7.51	96	23635	5.12	ug/L	97
11) Methylene chloride	7.71	84	29505	5.43	ug/L	97
12) Freon 113	7.78	101	28220	5.16	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.39	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.35	ug/L	91
15) MTBE	8.74	73	47481	5.43	ug/L	99
16) 1,1-Dichloroethane	8.92	63	57409	5.38	ug/L	99
17) Vinyl acetate	9.09	43	45219	5.46	ug/L	98
18) 2-Butanone (MEK)	9.47	72	1224	5.50	ug/L	# 37
19) cis-1,2-Dichloroethene	9.66	96	29437	5.56	ug/L	94
20) Bromochloromethane	9.87	128	11063	5.71	ug/L	95
21) Chloroform	9.93	83	49311	5.60	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.54	ug/L	100
24) 1,2-Dichloroethane	10.78	62	29254	5.45	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.54	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.40	ug/L	98
29) Benzene	11.44	78	106054	5.22	ug/L	98
30) Dibromomethane	12.17	93	12758	5.31	ug/L	97
31) 1,2-Dichloropropane	12.21	63	30926	5.45	ug/L	99
32) Trichloroethene	12.26	95	27719	5.46	ug/L	95
33) Bromodichloromethane	12.33	83	32710	5.49	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.89	ug/L	96
35) cis-1,3-Dichloropropene	13.17	75	39480	5.45	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	5.15	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.40	ug/L	99
40) Toluene	14.21	92	60380	5.23	ug/L	98
42) 1,3-Dichloropropane	14.27	76	31749	5.68	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031711.M Fri Mar 18 08:37:49 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.70	ug/L	# 86
44) Dibromochloromethane	14.64	129	17145	5.10	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.66	ug/L	# 98
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.02	ug/L	96
48) Chlorobenzene	16.12	112	60084	5.17	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.13	ug/L	99
50) m,p-Xylenes	16.64	106	39718	5.18	ug/L	100
51) Styrene	17.09	104	62548	5.38	ug/L	98
52) o-Xylene	17.20	106	38050	5.11	ug/L	98
55) Bromoform	16.81	173	9209	5.49	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	4203	5.70	ug/L	90
58) Isopropylbenzene	17.69	105	91339	5.15	ug/L	98
59) Bromobenzene	18.05	156	21568	5.27	ug/L	95
60) n-Propylbenzene	18.30	91	134531	5.32	ug/L	98
61) 2-Chlorotoluene	18.45	91	75803	5.11	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	97
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.17	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.10	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.13	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.17	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	42641	5.12	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.11	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.28	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.24	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.73	ug/L	90
73) 1,2,4-Trichlorobenzene	22.28	180	24323	5.20	ug/L	100
74) Naphthalene	22.63	128	32491	5.23	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.92	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	20581	5.39	ug/L	98

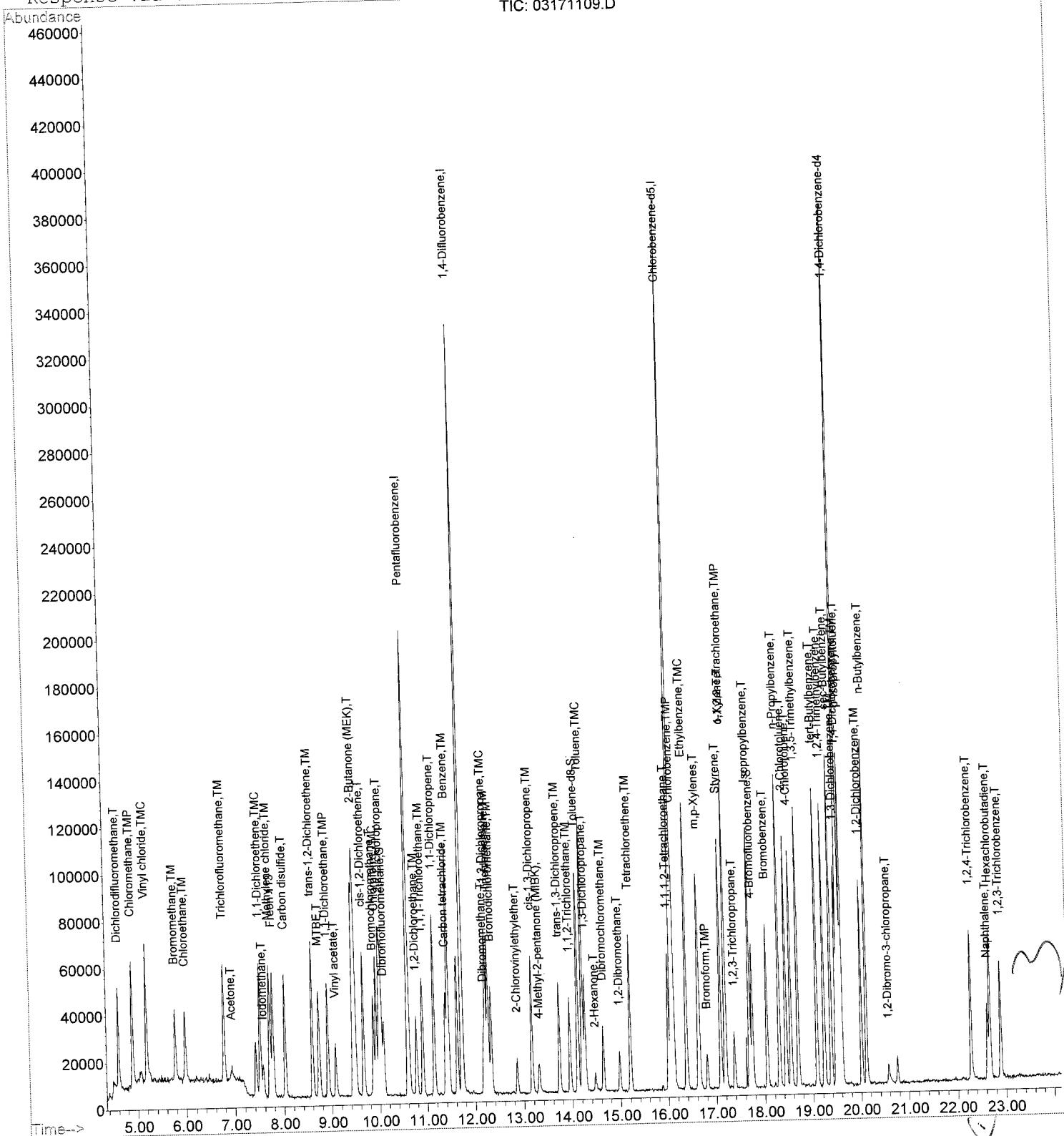
(#) = qualifier out of range (m) = manual integration  
 03171109.D 031711.M Fri Mar 18 08:37:49 2011

Page 2

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
Acq On : 17 Mar 2011 10:45 am Operator: LC  
Sample : 5.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Review*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	42710	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery	=	40.72%	
39) Toluene-d8	14.12	98	143321	9.62	ug/L	0.00
Spiked Amount 25.000			Recovery	=	38.48%	
53) 4-Bromofluorobenzene	17.75	95	50923	9.49	ug/L	0.00
Spiked Amount 25.000			Recovery	=	37.96%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	79957	10.15	ug/L	99
3) Chloromethane	4.89	50	135497	10.40	ug/L	99
4) Vinyl chloride	5.19	62	111850	9.64	ug/L	99
5) Bromomethane	5.78	94	53427	9.01	ug/L	95
6) Chloroethane	5.98	64	63788	10.38	ug/L	99
7) Trichlorofluoromethane	6.78	101	85392	10.59	ug/L	98
8) Acetone	6.94	43	11502	9.36	ug/L	99
9) Iodomethane	7.57	142	36401	9.84	ug/L	98
10) 1,1-Dichloroethene	7.51	96	46909	9.97	ug/L	96
11) Methylene chloride	7.71	84	55460	10.02	ug/L	99
12) Freon 113	7.78	101	52409	9.41	ug/L	98
13) Carbon disulfide	8.03	76	162804	9.73	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.82	ug/L	96
15) MTBE	8.74	73	84759	9.53	ug/L	97
16) 1,1-Dichloroethane	8.92	63	108838	10.03	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.70	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	10.73	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	53573	9.94	ug/L	99
20) Bromochloromethane	9.88	128	20976	10.64	ug/L	95
21) Chloroform	9.93	83	95119	10.62	ug/L	99
22) 2,2-Dichloropropane	10.04	77	73939	10.18	ug/L	100
24) 1,2-Dichloroethane	10.77	62	53618	9.81	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	66517	10.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.20	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.38	ug/L	98
29) Benzene	11.44	78	201076	9.95	ug/L	99
30) Dibromomethane	12.17	93	24596	10.29	ug/L	97
31) 1,2-Dichloropropane	12.21	63	55294	9.80	ug/L	99
32) Trichloroethene	12.27	95	49861	9.87	ug/L	99
33) Bromodichloromethane	12.33	83	60334	10.17	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	11.51	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	73950	10.27	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.82	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.25	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	27640	10.34	ug/L	99
40) Toluene	14.21	92	114354	9.95	ug/L	98
42) 1,3-Dichloropropane	14.27	76	56624	10.22	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031711.M Fri Mar 18 08:38:05 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.53	ug/L	# 98
44) Dibromochloromethane	14.64	129	32389	9.72	ug/L	99
45) 1,2-Dibromoethane	14.98	107	28536	10.26	ug/L	97
46) Tetrachloroethene	15.21	166	44478	10.13	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	9.79	ug/L	98
48) Chlorobenzene	16.12	112	113625	9.87	ug/L	99
49) Ethylbenzene	16.38	91	215370	9.93	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.77	ug/L	99
51) Styrene	17.09	104	115227	10.01	ug/L	99
52) o-Xylene	17.20	106	71920	9.74	ug/L	100
55) Bromoform	16.81	173	16316	10.27	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 97
57) 1,2,3-Trichloropropane	17.39	110	7243	10.36	ug/L	91
58) Isopropylbenzene	17.69	105	176438	10.50	ug/L	99
59) Bromobenzene	18.05	156	40825	10.53	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.45	ug/L	99
61) 2-Chlorotoluene	18.45	91	143690	10.22	ug/L	100
62) 4-Chlorotoluene	18.55	91	141563	10.16	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.42	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.37	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.25	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.17	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.41	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	69024	10.04	ug/L	98
71) n-Butylbenzene	20.12	91	183374	10.17	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	10.84	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	41924	9.44	ug/L	100
74) Naphthalene	22.63	128	55616	9.45	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.24	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	34759	9.60	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031711.M Fri Mar 18 08:38:05 2011

Quantitation Report

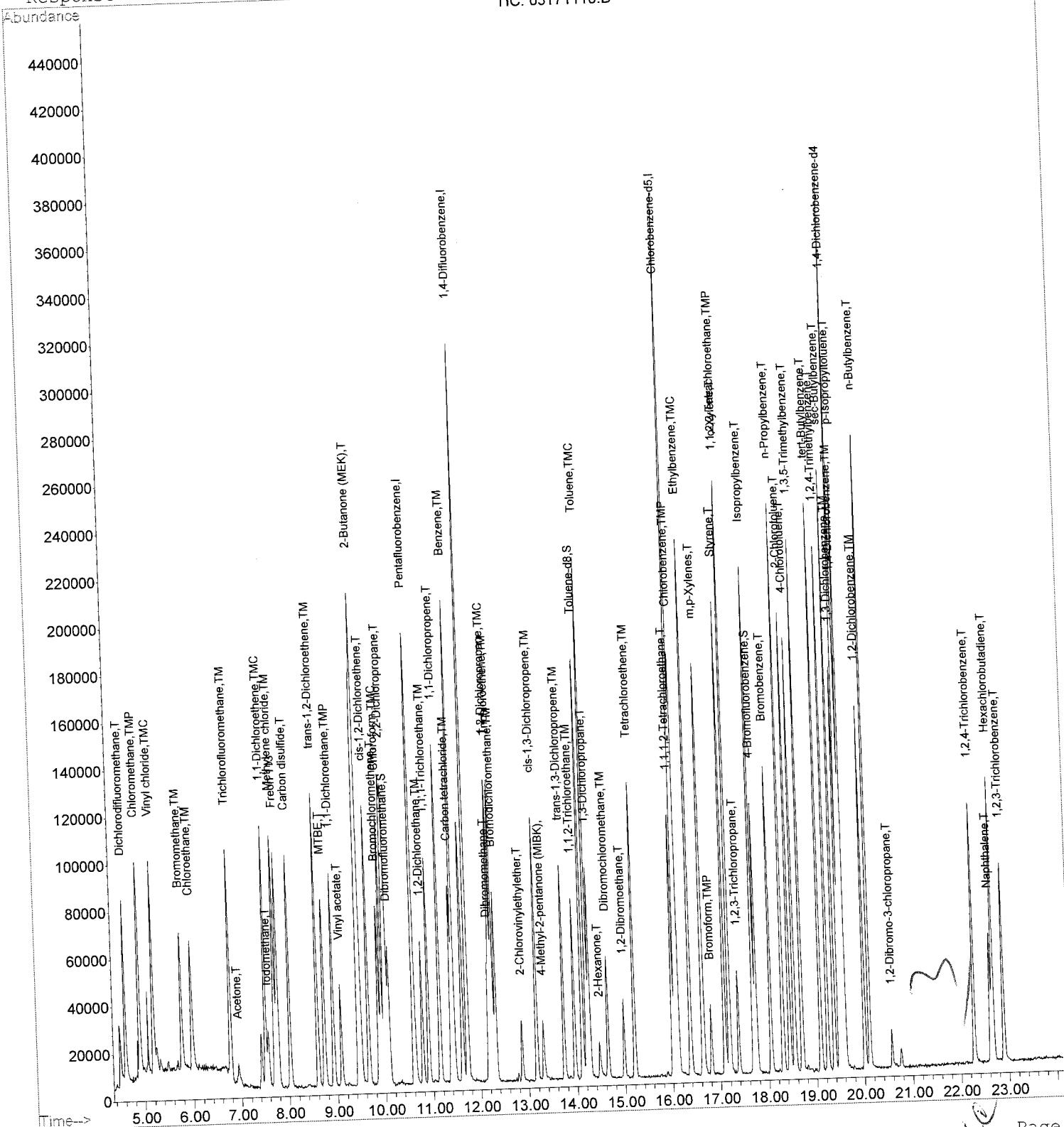
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D  
 Acq On : 17 Mar 2011 11:15 am  
 Sample : 10 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Vial: 7  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171110.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Re-Calc*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
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1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00

System Monitoring Compounds

23) Dibromofluoromethane	10.09	113	103380	25.00	ug/L	0.00
Spiked Amount 25.000			Recovery = 100.00%			
39) Toluene-d8	14.12	98	359841	24.50	ug/L	0.00
Spiked Amount 25.000			Recovery = 98.00%			
53) 4-Bromofluorobenzene	17.75	95	128707	24.22	ug/L	0.00
Spiked Amount 25.000			Recovery = 96.88%			

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue
2) Dichlorodifluoromethane	4.60	85	200064	25.77	ug/L	0.00	100
3) Chloromethane	4.89	50	322628	25.13	ug/L	0.00	100
4) Vinyl chloride	5.18	62	283499	24.80	ug/L	0.00	100
5) Bromomethane	5.78	94	141242	23.74	ug/L	0.00	100
6) Chloroethane	5.98	64	150117	24.77	ug/L	0.00	100
7) Trichlorofluoromethane	6.78	101	214158	26.95	ug/L	0.00	100
8) Acetone	6.94	43	25928	26.49	ug/L	0.00	100
9) Iodomethane	7.57	142	98109	26.69	ug/L	0.00	100
10) 1,1-Dichloroethene	7.51	96	111502	24.05	ug/L	0.00	100
11) Methylene chloride	7.71	84	132209	24.24	ug/L	0.00	100
12) Freon 113	7.77	101	133636	24.35	ug/L	0.00	100
13) Carbon disulfide	8.03	76	401884	24.37	ug/L	0.00	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.73	ug/L	0.00	100
15) MTBE	8.74	73	214946	24.52	ug/L	0.00	100
16) 1,1-Dichloroethane	8.92	63	264682	24.74	ug/L	0.00	100
17) Vinyl acetate	9.08	43	202265	24.34	ug/L	0.00	100
18) 2-Butanone (MEK)	9.47	72	6903	26.82	ug/L	0.00	100
19) cis-1,2-Dichloroethene	9.66	96	131490	24.75	ug/L	0.00	100
20) Bromochloromethane	9.87	128	47437	24.40	ug/L	0.00	100
21) Chloroform	9.93	83	218360	24.73	ug/L	0.00	100
22) 2,2-Dichloropropane	10.04	77	180118	25.16	ug/L	0.00	100
24) 1,2-Dichloroethane	10.78	62	136474	25.33	ug/L	0.00	100
25) 1,1,1-Trichloroethane	10.91	97	162207	25.58	ug/L	0.00	100
27) 1,1-Dichloropropene	11.15	75	191506	25.69	ug/L	0.00	100
28) Carbon tetrachloride	11.39	117	133369	25.91	ug/L	0.00	100
29) Benzene	11.44	78	490622	24.62	ug/L	0.00	100
30) Dibromomethane	12.17	93	58067	24.63	ug/L	0.00	100
31) 1,2-Dichloropropane	12.21	63	140014	25.15	ug/L	0.00	100
32) Trichloroethene	12.27	95	124690	25.02	ug/L	0.00	100
33) Bromodichloromethane	12.33	83	150764	25.77	ug/L	0.00	100
34) 2-Chlorovinylethylether	12.86	63	29010	28.39	ug/L	0.00	100
35) cis-1,3-Dichloropropene	13.16	75	183565	25.85	ug/L	0.00	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	24.58	ug/L	0.00	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.79	ug/L	0.00	100
38) 1,1,2-Trichloroethane	13.95	83	66374	25.19	ug/L	0.00	100
40) Toluene	14.21	92	282149	24.90	ug/L	0.00	100
42) 1,3-Dichloropropane	14.27	76	140210	25.55	ug/L	0.00	100

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031711.M Fri Mar 18 08:38:20 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplir: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	24.30	ug/L	# 100
44) Dibromochloromethane	14.64	129	81864	24.81	ug/L	100
45) 1,2-Dibromoethane	14.98	107	70424	25.57	ug/L	100
46) Tetrachloroethene	15.21	166	109364	25.15	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	24.44	ug/L	100
48) Chlorobenzene	16.12	112	284407	24.96	ug/L	100
49) Ethylbenzene	16.37	91	538674	25.09	ug/L	100
50) m,p-Xylenes	16.64	106	186494	24.80	ug/L	100
51) Styrene	17.09	104	295005	25.87	ug/L	100
52) o-Xylene	17.19	106	177920	24.34	ug/L	100
55) Bromoform	16.81	173	42372	26.07	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	25.00	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18834	26.34	ug/L	100
58) Isopropylbenzene	17.69	105	445254	25.90	ug/L	100
59) Bromobenzene	18.05	156	105054	26.49	ug/L	100
60) n-Propylbenzene	18.30	91	632559	25.78	ug/L	100
61) 2-Chlorotoluene	18.44	91	364433	25.35	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.89	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.71	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.63	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.64	ug/L	100
66) sec-Butylbenzene	19.37	105	556785	25.69	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	205642	25.45	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	201942	24.82	ug/L	100
69) p-Isopropyltoluene	19.61	119	434002	26.19	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.44	ug/L	100
71) n-Butylbenzene	20.12	91	487367	26.43	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	25.84	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	122376	26.96	ug/L	100
74) Naphthalene	22.63	128	163821	27.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	26.49	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	101564	27.44	ug/L	100

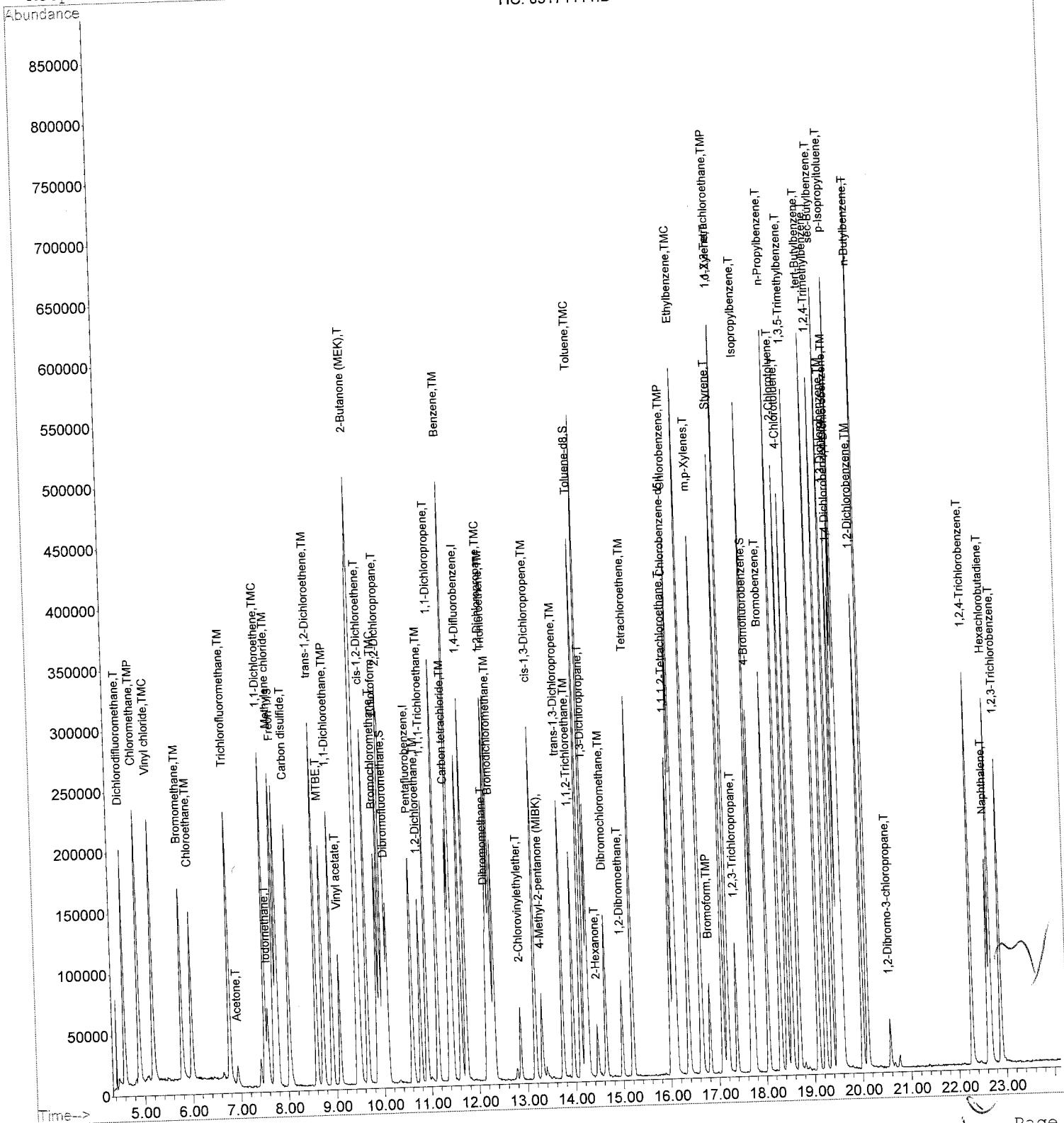
(#) = qualifier out of range (m) = manual integration  
 03171111.D 031711.M Fri Mar 18 08:38:21 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171111.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	202044	46.49	ug/L	0.00
Spiked Amount 25.000			Recovery =	185.96%		
39) Toluene-d8	14.11	98	726789	47.56	ug/L	0.00
Spiked Amount 25.000			Recovery =	190.24%		
53) 4-Bromofluorobenzene	17.76	95	259969	47.19	ug/L	0.00
Spiked Amount 25.000			Recovery =	188.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	391099	47.93	ug/L	98
3) Chloromethane	4.90	50	687656	50.97	ug/L	99
4) Vinyl chloride	5.18	62	596978	49.70	ug/L	98
5) Bromomethane	5.78	94	296252	47.13	ug/L	98
6) Chloroethane	5.99	64	300876	47.25	ug/L	99
7) Trichlorofluoromethane	6.78	101	340516	40.77	ug/L	97
8) Acetone	6.93	43	44278	45.51	ug/L	99
9) Iodomethane	7.58	142	195341	50.45	ug/L	98
10) 1,1-Dichloroethene	7.52	96	220268	45.21	ug/L	99
11) Methylene chloride	7.71	84	264019	46.07	ug/L	99
12) Freon 113	7.78	101	262900	45.58	ug/L	99
13) Carbon disulfide	8.03	76	807912	46.61	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.15	ug/L	98
15) MTBE	8.73	73	407385	44.23	ug/L	99
16) 1,1-Dichloroethane	8.92	63	517515	46.02	ug/L	99
17) Vinyl acetate	9.08	43	400997	45.91	ug/L	99
18) 2-Butanone (MEK)	9.47	72	13656	49.70	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	257331	46.10	ug/L	99
20) Bromochloromethane	9.87	128	96376	47.18	ug/L	96
21) Chloroform	9.93	83	424654	45.77	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.51	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	46.20	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	323769	48.60	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.20	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	50.05	ug/L	100
29) Benzene	11.44	78	1008066	48.61	ug/L	98
30) Dibromomethane	12.17	93	116662	47.55	ug/L	98
31) 1,2-Dichloropropane	12.21	63	281688	48.64	ug/L	100
32) Trichloroethene	12.26	95	255144	49.21	ug/L	99
33) Bromodichloromethane	12.33	83	300337	49.34	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	50.19	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	364674	49.35	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	47.40	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.75	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	48.12	ug/L	99
40) Toluene	14.22	92	583744	49.52	ug/L	98
42) 1,3-Dichloropropane	14.27	76	277506	48.79	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031711.M Fri Mar 18 08:38:39 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	50.92	ug/L	# 94
44) Dibromochloromethane	14.65	129	168655	49.32	ug/L	98
45) 1,2-Dibromoethane	14.98	107	142279	49.83	ug/L	97
46) Tetrachloroethene	15.20	166	223148	49.50	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	48.47	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.83	ug/L	99
49) Ethylbenzene	16.38	91	1095906	49.25	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.30	ug/L	98
51) Styrene	17.10	104	602783	50.99	ug/L	99
52) o-Xylene	17.20	106	366193	48.33	ug/L	97
55) Bromoform	16.82	173	87491	52.11	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.02	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	50.24	ug/L	96
58) Isopropylbenzene	17.70	105	904235	50.93	ug/L	99
59) Bromobenzene	18.05	156	210716	51.44	ug/L	99
60) n-Propylbenzene	18.30	91	1279523	50.48	ug/L	100
61) 2-Chlorotoluene	18.45	91	736550	49.60	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.32	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.75	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	50.66	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	772492	50.09	ug/L	99
66) sec-Butylbenzene	19.38	105	1121222	50.08	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	414698	49.68	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	411367	48.95	ug/L	98
69) p-Isopropyltoluene	19.61	119	866615	50.64	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	49.55	ug/L	99
71) n-Butylbenzene	20.11	91	964633	50.65	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	49.85	ug/L	91
73) 1,2,4-Trichlorobenzene	22.28	180	240360	51.26	ug/L	99
74) Naphthalene	22.63	128	314469	50.58	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	50.29	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	192513	50.36	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031711.M Fri Mar 18 08:38:39 2011

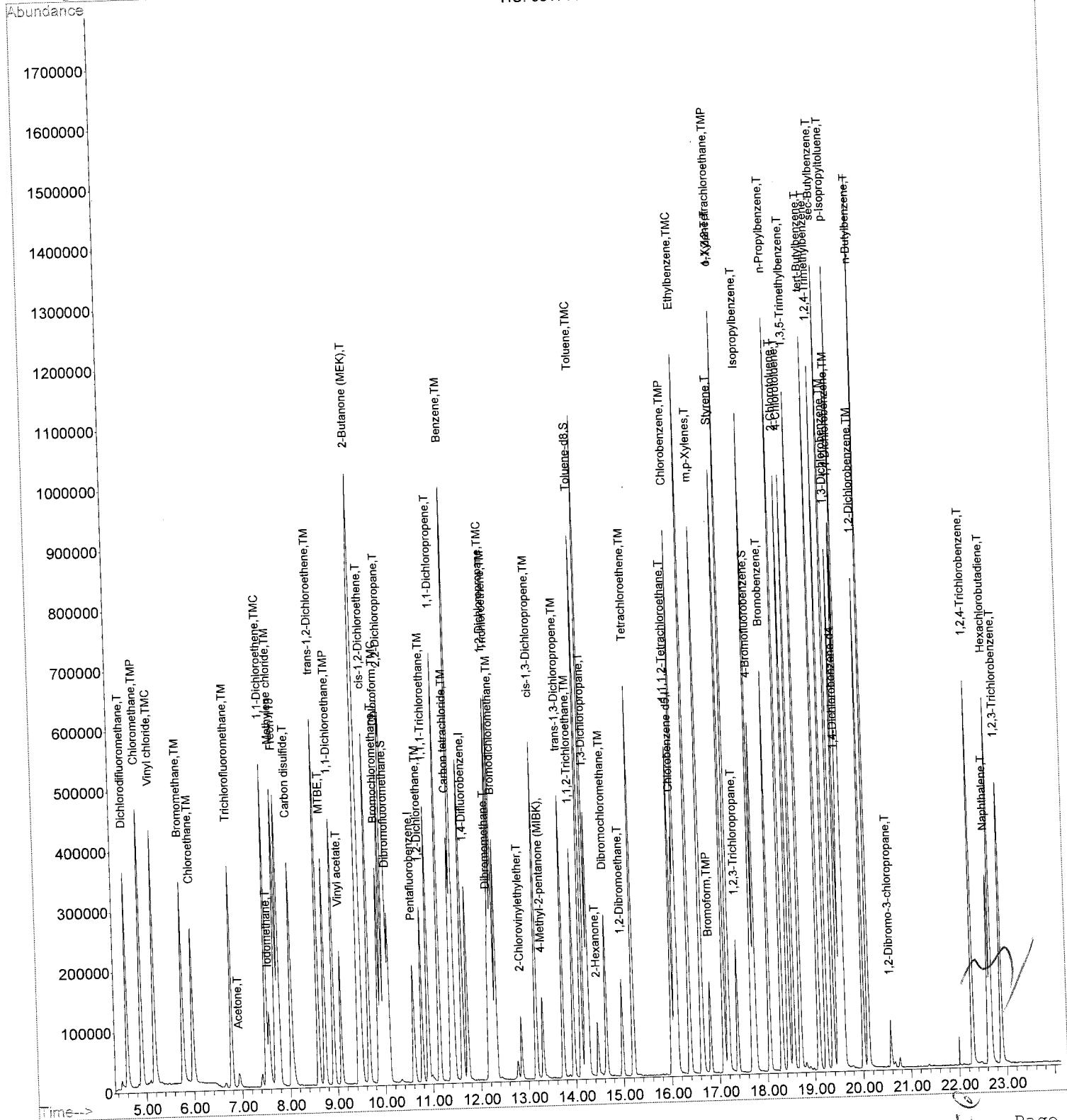
Page 2

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171112.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc :

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Re-Calc*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	425047	96.46	ug/L	0.00
Spiked Amount 25.000			Recovery	= 385.84%		
39) Toluene-d8	14.12	98	1505447	96.52	ug/L	0.00
Spiked Amount 25.000			Recovery	= 386.08%		
53) 4-Bromofluorobenzene	17.75	95	536695	97.52	ug/L	0.00
Spiked Amount 25.000			Recovery	= 390.08%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	779223	94.19	ug/L	98
3) Chloromethane	4.90	50	1431368	104.65	ug/L	99
4) Vinyl chloride	5.18	62	1228117	100.85	ug/L	100
5) Bromomethane	5.78	94	641424	100.36	ug/L	98
6) Chloroethane	5.98	64	584071	90.47	ug/L	100
7) Trichlorofluoromethane	6.78	101	698452	82.49	ug/L	98
8) Acetone	6.94	43	84316	88.94	ug/L	97
9) Iodomethane	7.58	142	393011	100.00	ug/L	99
10) 1,1-Dichloroethene	7.52	96	450680	91.25	ug/L	99
11) Methylene chloride	7.71	84	530536	91.30	ug/L	99
12) Freon 113	7.78	101	537890	91.98	ug/L	99
13) Carbon disulfide	8.04	76	1652598	94.04	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.19	ug/L	96
15) MTBE	8.74	73	859812	92.07	ug/L	99
16) 1,1-Dichloroethane	8.93	63	1054794	92.52	ug/L	99
17) Vinyl acetate	9.08	43	827230	93.42	ug/L	99
18) 2-Butanone (MEK)	9.47	72	27904	99.26	ug/L	96
19) cis-1,2-Dichloroethene	9.66	96	527963	93.29	ug/L	99
20) Bromochloromethane	9.87	128	191014	92.23	ug/L	94
21) Chloroform	9.93	83	877382	93.27	ug/L	100
22) 2,2-Dichloropropane	10.04	77	739530	96.96	ug/L	99
24) 1,2-Dichloroethane	10.78	62	540824	94.21	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	659685	97.66	ug/L	98
27) 1,1-Dichloropropene	11.15	75	764611	96.58	ug/L	98
28) Carbon tetrachloride	11.39	117	547122	100.10	ug/L	100
29) Benzene	11.44	78	2051183	96.91	ug/L	99
30) Dibromomethane	12.17	93	236182	94.32	ug/L	99
31) 1,2-Dichloropropane	12.21	63	573859	97.07	ug/L	99
32) Trichloroethene	12.27	95	518186	97.91	ug/L	100
33) Bromodichloromethane	12.33	83	619726	99.74	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	99299	94.85	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	755768	100.21	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	100.07	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	581943	99.98	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	272981	97.54	ug/L	99
40) Toluene	14.22	92	1181672	98.20	ug/L	98
42) 1,3-Dichloropropane	14.27	76	562918	99.07	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031711.M Fri Mar 18 08:38:55 2011

126 of 285

Page 1

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	107.35	ug/L #	96
44) Dibromochloromethane	14.65	129	341882	100.06	ug/L	98
45) 1,2-Dibromoethane	14.98	107	294156	103.12	ug/L	99
46) Tetrachloroethene	15.20	166	455622	101.17	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	100.03	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.85	ug/L	99
49) Ethylbenzene	16.38	91	2245318	100.99	ug/L	100
50) m,p-Xylenes	16.64	106	773283	99.30	ug/L	100
51) Styrene	17.10	104	1244691	105.39	ug/L	99
52) o-Xylene	17.20	106	750628	99.16	ug/L	97
55) Bromoform	16.82	173	182147	105.27	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.52	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	75618	99.33	ug/L	96
58) Isopropylbenzene	17.70	105	1844526	100.80	ug/L	100
59) Bromobenzene	18.05	156	429425	101.72	ug/L	99
60) n-Propylbenzene	18.30	91	2615929	100.14	ug/L	100
61) 2-Chlorotoluene	18.45	91	1500663	98.05	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.39	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	100.18	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	99.86	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	99.31	ug/L	99
66) sec-Butylbenzene	19.39	105	2280043	98.81	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	98.46	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.78	ug/L	98
69) p-Isopropyltoluene	19.61	119	1785874	101.26	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	97.71	ug/L	100
71) n-Butylbenzene	20.12	91	1981760	100.96	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	98.40	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	510699	105.68	ug/L	99
74) Naphthalene	22.63	128	678287	105.85	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	102.46	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	412634	104.74	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031711.M Fri Mar 18 08:38:56 2011

## Quantitation Report

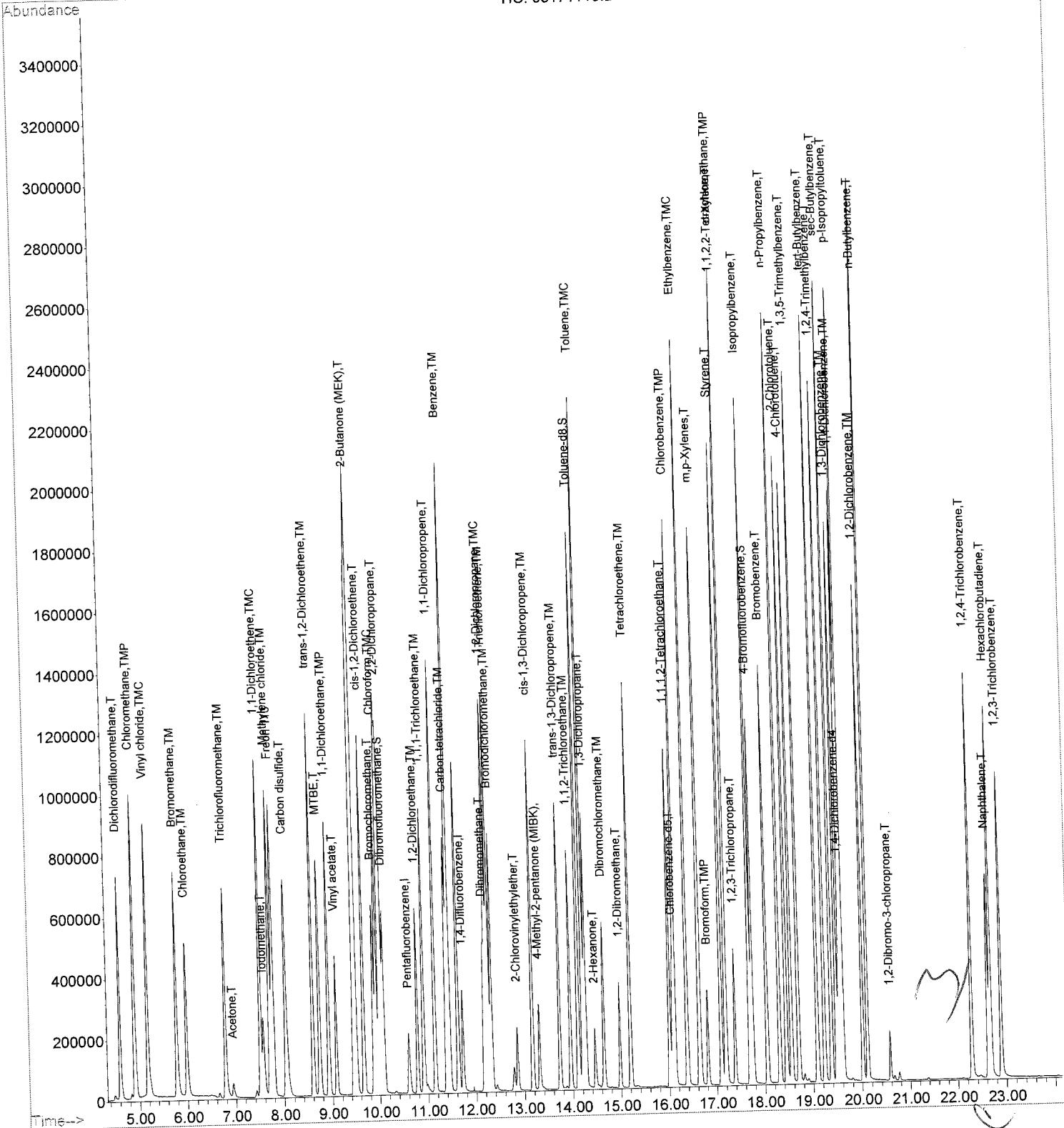
Data File : C:\HPCHEM\1\GCMS7\DATA  
Acq On : 17 Mar 2011 12:48 pm  
Sample : 100 PPB  
Misc :  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:38 2011

vial: 10  
Operator: LC  
Inst : GCMS7  
Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration

TIC: 03171113.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc :

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*Re-Calc*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	839626	186.83	ug/L	0.00
Spiked Amount 25.000			Recovery	= 747.32%		
39) Toluene-d8	14.12	98	3013932	192.60	ug/L	0.00
Spiked Amount 25.000			Recovery	= 770.40%		
53) 4-Bromofluorobenzene	17.76	95	1038923	185.85	ug/L	0.00
Spiked Amount 25.000			Recovery	= 743.40%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	1487523	176.30	ug/L	98
3) Chloromethane	4.90	50	2913054	208.82	ug/L	99
4) Vinyl chloride	5.16	62	2428967	195.57	ug/L	100
5) Bromomethane	5.78	94	1343422	205.83	ug/L	97
6) Chloroethane	5.98	64	1199344	182.14	ug/L	100
7) Trichlorofluoromethane	6.79	101	1701514	197.03	ug/L	99
8) Acetone	6.94	43	201529	213.75	ug/L	98
9) Iodomethane	7.58	142	794173	198.00	ug/L	98
10) 1,1-Dichloroethene	7.52	96	920511	182.74	ug/L	98
11) Methylene chloride	7.71	84	1063508	179.46	ug/L	97
12) Freon 113	7.78	101	1079115	180.94	ug/L	98
13) Carbon disulfide	8.03	76	3312605	184.83	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	185.90	ug/L	97
15) MTBE	8.74	73	1719756	180.56	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	181.08	ug/L	99
17) Vinyl acetate	9.08	43	1660788	183.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	57153	198.44	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	1073476	185.99	ug/L	98
20) Bromochloromethane	9.88	128	361702	171.24	ug/L	95
21) Chloroform	9.93	83	1746080	182.00	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	186.19	ug/L	98
24) 1,2-Dichloroethane	10.78	62	1056987	180.53	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	1325051	192.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	1539559	193.84	ug/L	99
28) Carbon tetrachloride	11.39	117	1092097	199.16	ug/L	100
29) Benzene	11.45	78	4061777	191.29	ug/L	99
30) Dibromomethane	12.17	93	461244	183.60	ug/L	98
31) 1,2-Dichloropropane	12.21	63	1126863	190.00	ug/L	100
32) Trichloroethene	12.27	95	1022222	192.52	ug/L	98
33) Bromodichloromethane	12.33	83	1217593	195.34	ug/L	100
34) 2-Chlorovinylether	12.86	63	174106	166.89	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	197.58	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	195.44	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.66	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	536251	191.00	ug/L	100
40) Toluene	14.22	92	2368495	196.20	ug/L	98
42) 1,3-Dichloropropane	14.28	76	1107954	191.97	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031711.M Fri Mar 18 08:39:11 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

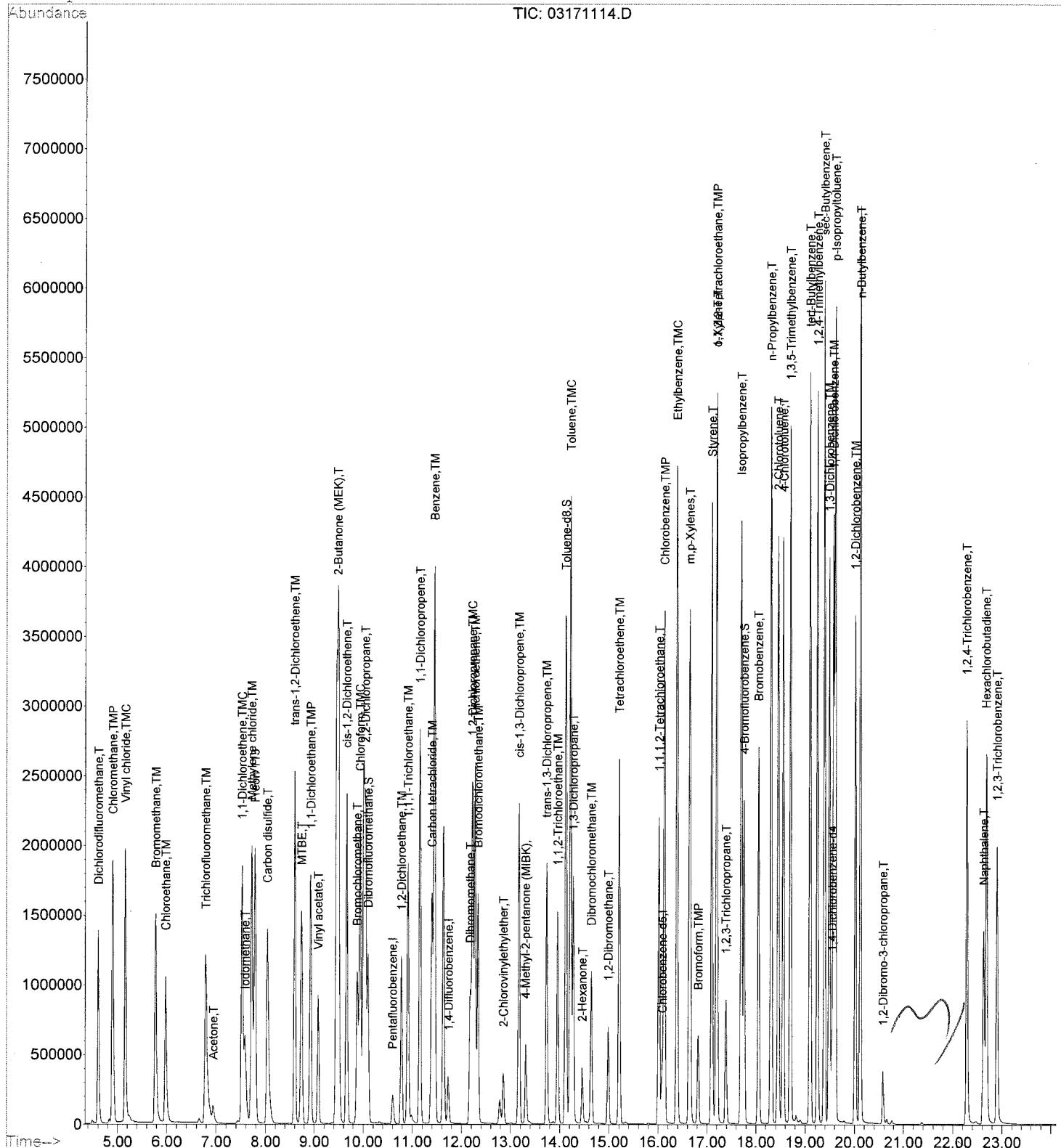
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	206.17	ug/L	# 96
44) Dibromochloromethane	14.65	129	686033	197.67	ug/L	99
45) 1,2-Dibromoethane	14.99	107	575405	198.59	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.85	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	200.14	ug/L	96
48) Chlorobenzene	16.13	112	2393108	199.64	ug/L	97
49) Ethylbenzene	16.38	91	4465000	197.71	ug/L	99
50) m,p-Xylenes	16.64	106	1550944	196.07	ug/L	99
51) Styrene	17.10	104	2561762	213.54	ug/L	98
52) o-Xylene	17.20	106	1517247	197.33	ug/L	97
55) Bromoform	16.82	173	364089	184.76	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.71	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	155202	179.01	ug/L	97
58) Isopropylbenzene	17.70	105	3655213	175.39	ug/L	99
59) Bromobenzene	18.05	156	865850	180.09	ug/L	98
60) n-Propylbenzene	18.31	91	5305462	178.33	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	179.50	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.40	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	193.53	ug/L	98
64) tert-Butylbenzene	19.09	119	2997423	195.51	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	189.77	ug/L	98
66) sec-Butylbenzene	19.39	105	5038432	191.73	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	1885851	192.49	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.90	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	200.23	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	193.10	ug/L	99
71) n-Butylbenzene	20.12	91	4374192	195.66	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	192.76	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	201.28	ug/L	98
74) Naphthalene	22.63	128	1413680	193.70	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	195.85	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	830638	185.13	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031711.M Fri Mar 18 08:39:11 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:39 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL DATA**

METHOD: 8260B

DATE: 03/22/2011

WORK ORDER: PUC1004



## Phoenix

SOP No. PE-VOA-001, Rev. 1  
Effective Date: 03/11/2010  
Page No.: 1 of 1

## **ANALYTICAL DATA REVIEW CHECKLIST**

SOP PE-VOA-001 R.1

GC/MS Volatile Organic Analysis [ Method No. EPA 624 & 8260B ]

GC/MS Volatile Organic Analysis   Method No. EPA 624-02-01			
Analysis Date:	03/22/11	Analyst:	LL
	Description	Yes	No
1.	BFB (50 ng or less): Verify meets criteria every 12 hours	/	
2.	Initial Calibration Curve (5 levels)	/	
-	Date of Initial Calibration: 03/17/11, W	/	
-	SPCCs must meet Min. RF	/	
-	CCCs ≤ 30% RPD	/	
-	All other compounds ≤ 15% RSD or use curve	/	
-	Comments:	/	
-	Second source within historical limits	/	
3.	Continuing Calibration Check (every 12 hours)	/	
-	SPCCs must meet Min. RF	/	
-	CCCs ≤ 20% D	/	
-	IS RT ± 30 secs	/	
-	IS area -50% to +100%	/	
-	All CCVs for reported analytes within historical limits	/	1
4.	Method Blank	/	
-	Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/	
-	All compounds of interest must be < Reporting Limit	/	
5.	Laboratory Control Samples (LCS/LCSD)	/	
-	Must be analyzed per 20 samples/per matrix/per batch	/	
-	LCS/LCSD recoveries within historical limits	/	
-	RPD ≤ 25%	/	
-	Surrogates within historical limits	/	
6.	MS/MSD	/	
-	Must be analyzed per 20 samples/per matrix/per batch	/	
-	MS/MSD recoveries within historical limits	/	
-	RPD ≤ 25%	/	
-	Surrogates within historical limits	/	
7.	Samples	/	
-	Analyzed within 14 days of sampling	/	
-	IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL or CCV	/	
-	Surrogate recoveries within historical limits	/	
-	pH ≤ 2	/	
-	If pH is not ≤ 2, flag data with P and pH Data Qualifier	/	
Comments:			
(1)	Acetone - C	CARB# M134	
(2)	Iodomethane - L	Methylene chloride - RF	

**Comments:**

① Acetone - C  
② Iodomethane - L

Cart 14134

**Toddler Name** =

NOTE: Batch = 12 hour (from injection of BFB)

NOTE: Batch = 12 hour (from injection of BFB)

NOTE: Batch = 12 hour (from injection of B-P-B)		Date: 03/22/11
Review Signatures:	Analyst: 	Date:
	Reviewer: 	Date: 3/22/11

1) NA: Not Applicable

# Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\032211

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03221101.d	1.	TUNE		22 Mar 2011 06:38
2	1	03221102.d	1.	25 PPB CCV		22 Mar 2011 06:58
3	2	03221103.d	1.	-BS1		22 Mar 2011 07:29
4	3	03221104.d	1.	-BSD1		22 Mar 2011 08:00
5	4	03221105.d	1.	-BLK1		22 Mar 2011 08:31
6	5	03221106.d	1.	DNU		22 Mar 2011 09:01
7	6	03221107.d	1.	PUC1114-05	TB	22 Mar 2011 09:32
8	7	03221108.d	1.	PUC0982-02	SOURCE	22 Mar 2011 10:03
9	8	03221109.d	1.	-MS1		22 Mar 2011 10:34
10	9	03221110.d	1.	-MSD1		22 Mar 2011 11:05
11	10	03221111.d	1.	PUC1083-19RE2	100X	22 Mar 2011 11:36
12	12	03221112.d	1.	PUC0982-01		22 Mar 2011 12:07
13	13	03221113.d	1.	PUC0982-03		22 Mar 2011 12:37
14	13	03221114.d	1.	PUC0982-04		22 Mar 2011 13:08
15	16	03221115.d	1.	PUC1002-01		22 Mar 2011 13:39
16	1	03221116.d	1.	PUC1083-20RE1		22 Mar 2011 14:10
17	2	03221117.d	1.	PUC0997-01RE1	20X	22 Mar 2011 14:41
18	3	03221118.d	1.	PUC1004-01		22 Mar 2011 15:12
19	4	03221119.d	1.	PUC1113-01		22 Mar 2011 15:43
20	5	03221120.d	1.	PUC1114-01		22 Mar 2011 16:13
21	6	03221121.d	1.	PUC1114-02		22 Mar 2011 16:44
22	7	03221122.d	1.	PUC1114-03		22 Mar 2011 17:15
23	8	03221123.d	1.	PUC1114-04		22 Mar 2011 17:46
24	9	03221124.d	1.	PUC1117-01		22 Mar 2011 18:16

3/31/11

3/31/11  
134 of 285

TestAmerica  
Phoenix

# GC/MS 7 DAILY LOG SUMMARY

DATE: 03/22/11  
ANALYST: LC

QC BATCH # (s):

11C0791

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\032211

CALIBRATION METHOD(S): 031711.w1

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	03221101	Tune	2uL	N/A	8260B	H <sub>2</sub> O	
1	02	25 ppb CCV	1x10mL				Acetone ↑
2	03	11C0791 -BSI					Iodomethane ↑
3	04	1 -BSD1					
4	05	1 -BSK1					
1	06	DNu					Bad Purge -DNu
5	07	PUC1114-05A (TB)		≤2			
6	08	0982-03A		≤2			Source
7	09	11C0791 -MS1		≤2			
8	10	1 -MSD1		≤2			
9	11	PUC1083-19C RE2	100x100uL	≤2			Benzene Only
10	12	0982-01A	1x10mL	≤2			
12	13	1 -03A		≤2			
13	14	1 -04A		≤2			
16	15	1002-01A		≤2			
1	16	1083-20S RE1		≤2			Possible carryover in origin
2	17	0997-01B RE1	20x500uL	≤2			no MTBE
3	18	1004-01A	1x10mL	≤2			
4	19	1113-01A		≤2			
5	20	1114-01A		≤2			
6	21	1 -03A		≤2			
7	22	1 -05A		≤2			
8	23	1 -04A		≤2			
9	24	1117-01A		≤2			

## STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PU01537

CALIBRATION STD: 11054

Internal Std: 11055

IS/Surrogate/BFB: 11052 /PU01361

LOT #: N/A

## REQUIRED REVIEWS

ARCHON REVIEWED

By / Date: LC 03/22/11

135 of 285

SEQUENCE REVIEWED

By / Date: LC 03/22/11

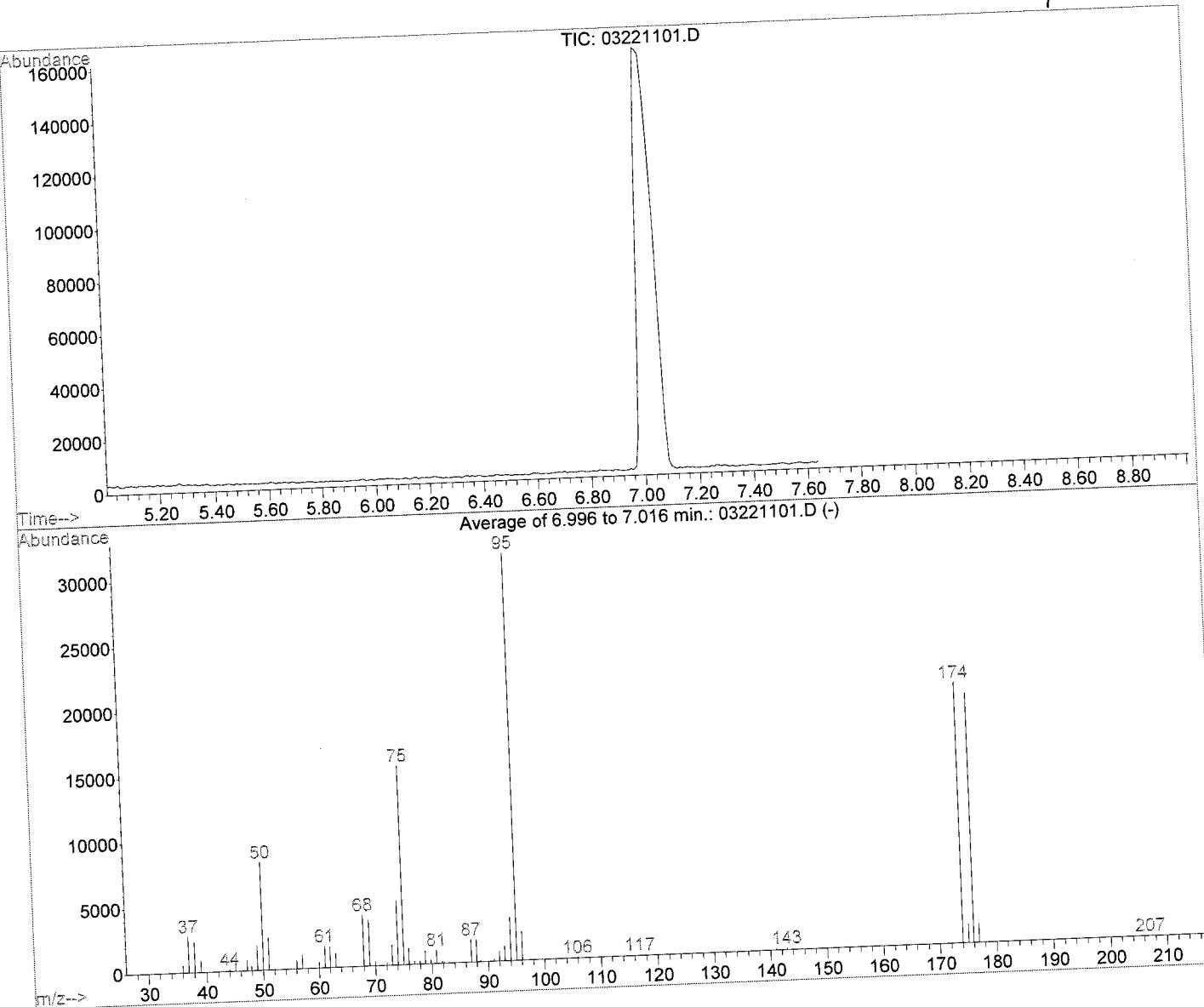
FINAL REVIEWER / Date:

m/b/11

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221101.D      Vial: 1  
 Acq On : 22 Mar 2011 6:38 am      Operator: LC  
 Sample : TUNE      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

13/22/11



Spectrum Information: Average of 6.996 to 7.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.5	8264	PASS
75	95	30	60	48.8	15225	PASS
95	95	100	100	100.0	31216	PASS
96	95	5	9	6.9	2168	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.0	19965	PASS
175	174	5	9	7.1	1423	PASS
176	174	95	101	95.7	19101	PASS
177	176	5	9	7.3	1391	PASS

136 of 285

## NEW8260-CCV

Data File Name 03221102.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\032211\  
 Operator LC  
 Date Acquired 3/22/2011 6:58  
 Acq. Method File 8260B  
 Sample Name 25 PPB CCV  
 Instrument Name GCMS7

3/22/11

Internal Standard	Target Response	CCV Response	Low	High	T/F	
Pentafluorobenzene	192989	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	343848	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	285042	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	125736	112264	56132	224528	TRUE	
Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	23.37	25.00	93.49	60	150	TRUE
Chloromethane	22.37	25.00	89.47	60	140	TRUE
Vinyl chloride	23.46	25.00	93.83	80	120	TRUE CCC
Bromomethane	19.31	25.00	77.23	70	140	TRUE
Chloroethane	24.38	25.00	97.54	70	130	TRUE
Trichlorofluoromethane	23.44	25.00	93.75	70	150	TRUE FALSE
Acetone	45.23	25.00	180.92	10	150	TRUE
Iodomethane	27.94	25.00	111.77	70	140	TRUE CCC
1,1-Dichloroethene	21.11	25.00	84.43	80	120	TRUE
Methylene chloride	20.44	25.00	81.75	70	120	TRUE
Freon 113	20.47	25.00	81.89	60	140	TRUE
Carbon disulfide	25.10	25.00	100.41	70	130	TRUE
trans-1,2-Dichloroethene	21.14	25.00	84.56	80	120	TRUE
MTBE	20.61	25.00	82.45	70	130	TRUE
1,1-Dichloroethane	20.66	25.00	82.65	70	125	TRUE
Vinyl acetate	20.71	25.00	82.86	40	150	TRUE
2-Butanone (MEK)	25.26	25.00	101.02	40	150	TRUE
cis-1,2-Dichloroethene	21.01	25.00	84.05	80	120	TRUE CCC
Bromochloromethane	21.64	25.00	86.55	80	120	TRUE
Chloroform	20.72	25.00	82.89	80	120	TRUE
2,2-Dichloropropane	22.07	25.00	88.29	80	130	TRUE
<b>Dibromofluoromethane</b>	<b>22.65</b>	<b>25.00</b>	<b>90.61</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	20.85	25.00	83.41	75	130	TRUE
1,1,1-Trichloroethane	21.92	25.00	87.68	80	120	TRUE
1,1-Dichloropropene	21.61	25.00	86.44	80	120	TRUE
Carbon tetrachloride	22.56	25.00	90.25	80	130	TRUE
Benzene	21.00	25.00	84.00	80	120	TRUE CCC
Dibromomethane	20.50	25.00	82.01	80	120	TRUE
1,2-Dichloropropane	20.49	25.00	81.97	80	120	TRUE
Trichloroethene	21.12	25.00	84.47	80	120	TRUE
Bromodichloromethane	21.21	25.00	84.84	80	120	TRUE
2-Chlorovinylethylether	26.56	25.00	106.23	70	135	TRUE
cis-1,3-Dichloropropene	20.82	25.00	83.27	80	120	TRUE
4-Methyl-2-pentanone (MIB)	21.33	25.00	85.31	60	130	TRUE
trans-1,3-Dichloropropene	20.73	25.00	82.91	80	125	TRUE

137 of 285

1,1,2-Trichloroethane	20.80	25.00	83.20	80	120	TRUE
<b>Toluene-d8</b>	<b>22.38</b>	<b>25.00</b>	<b>89.54</b>	<b>80</b>	<b>120</b>	TRUE CCC
Toluene	20.95	25.00	83.80	80	120	TRUE
1,3-Dichloropropane	20.27	25.00	81.08	80	120	TRUE
2-Hexanone	22.33	25.00	89.31	20	150	TRUE
Dibromochloromethane	20.46	25.00	81.83	80	120	TRUE
1,2-Dibromoethane	21.17	25.00	84.67	80	120	TRUE
Tetrachloroethene	20.98	25.00	83.92	70	130	TRUE
1,1,1,2-Tetrachloroethane	20.93	25.00	83.72	80	120	TRUE
Chlorobenzene	20.83	25.00	83.31	80	120	TRUE CCC
Ethylbenzene	21.08	25.00	84.32	80	120	TRUE
m,p-Xylenes	21.49	25.00	85.97	60	140	TRUE
Styrene	22.26	25.00	89.03	80	120	TRUE
o-Xylene	20.67	25.00	82.70	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>21.79</b>	<b>25.00</b>	<b>87.14</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	22.32	25.00	89.29	80	120	TRUE
1,1,2,2-Tetrachloroethane	20.56	25.00	82.23	80	120	TRUE
1,2,3-Trichloropropane	21.39	25.00	85.56	70	130	TRUE
Isopropylbenzene	23.16	25.00	92.65	80	130	TRUE
Bromobenzene	22.35	25.00	89.40	80	120	TRUE
n-Propylbenzene	23.03	25.00	92.12	75	130	TRUE
2-Chlorotoluene	22.50	25.00	90.01	80	120	TRUE
4-Chlorotoluene	22.55	25.00	90.20	80	120	TRUE
1,3,5-Trimethylbenzene	23.19	25.00	92.78	80	130	TRUE
tert-Butylbenzene	23.20	25.00	92.81	80	120	TRUE
1,2,4-Trimethylbenzene	23.03	25.00	92.12	80	120	TRUE
sec-Butylbenzene	22.99	25.00	91.98	80	125	TRUE
1,3-Dichlorobenzene	22.27	25.00	89.10	80	120	TRUE
1,4-Dichlorobenzene	21.99	25.00	87.95	80	120	TRUE
p-Isopropyltoluene	23.62	25.00	94.48	80	130	TRUE
1,2-Dichlorobenzene	21.32	25.00	85.27	80	120	TRUE
n-Butylbenzene	23.30	25.00	93.20	80	130	TRUE
1,2-Dibromo-3-chloropropane	19.47	25.00	77.90	50	150	TRUE
1,2,4-Trichlorobenzene	22.42	25.00	89.67	50	150	TRUE
Naphthalene	20.53	25.00	82.11	40	150	TRUE
Hexachlorobutadiene	23.71	25.00	94.83	40	150	TRUE
1,2,3-Trichlorobenzene	22.25	25.00	89.01	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D Vial: 1  
 Acq On : 22 Mar 2011 6:58 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:22 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

## Internal Standards

	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	192989	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	343848	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	285042	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	125736	25.00	ug/L	0.00

## System Monitoring Compounds

23) Dibromofluoromethane	10.08	113	110000	22.65	ug/L	0.00
Spiked Amount	25.000			Recovery	= 90.60%	
39) Toluene-d8	14.10	98	388191	22.38	ug/L	-0.01
Spiked Amount	25.000			Recovery	= 89.52%	
53) 4-Bromofluorobenzene	17.75	95	136097	21.79	ug/L	0.00
Spiked Amount	25.000			Recovery	= 87.16%	

## Target Compounds

				Qvalue
2) Dichlorodifluoromethane	4.59	85	213089	23.37 ug/L 98
3) Chloromethane	4.89	50	337179	22.37 ug/L 99
4) Vinyl chloride	5.18	62	314832	23.46 ug/L 98
5) Bromomethane	5.78	94	134516	19.31 ug/L 100
6) Chloroethane	5.98	64	173501	24.38 ug/L 98
7) Trichlorofluoromethane	6.77	101	218697	23.44 ug/L 100
8) Acetone	6.92	43	49192	45.23 ug/L 100
9) Iodomethane	7.57	142	120625	27.94 ug/L 100
10) 1,1-Dichloroethene	7.51	96	114889	21.11 ug/L 99
11) Methylene chloride	7.70	84	130878	20.44 ug/L 99
12) Freon 113	7.77	101	131933	20.47 ug/L 100
13) Carbon disulfide	8.02	76	486157	25.10 ug/L 100
14) trans-1,2-Dichloroethene	8.59	96	127312	21.14 ug/L 96
15) MTBE	8.73	73	212128	20.61 ug/L 100
16) 1,1-Dichloroethane	8.92	63	259588	20.66 ug/L 99
17) Vinyl acetate	9.08	43	202136	20.71 ug/L 100
18) 2-Butanone (MEK)	9.46	72	7617	25.26 ug/L 96
19) cis-1,2-Dichloroethene	9.65	96	131050	21.01 ug/L 98
20) Bromochloromethane	9.86	128	49383	21.64 ug/L 99
21) Chloroform	9.92	83	214825	20.72 ug/L 99
22) 2,2-Dichloropropane	10.03	77	185522	22.07 ug/L 97
24) 1,2-Dichloroethane	10.77	62	131923	20.85 ug/L 99
25) 1,1,1-Trichloroethane	10.90	97	163179	21.92 ug/L 99
27) 1,1-Dichloropropene	11.14	75	190209	21.61 ug/L 98
28) Carbon tetrachloride	11.38	117	137119	22.56 ug/L 100
29) Benzene	11.44	78	494195	21.00 ug/L 99
30) Dibromomethane	12.16	93	57078	20.50 ug/L 99
31) 1,2-Dichloropropane	12.20	63	134693	20.49 ug/L 99
32) Trichloroethene	12.25	95	124260	21.12 ug/L 99
33) Bromodichloromethane	12.32	83	146515	21.21 ug/L 100
34) 2-Chlorovinylethylether	12.85	63	32154	26.56 ug/L 99
35) cis-1,3-Dichloropropene	13.16	75	174563	20.82 ug/L 98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	73258	21.33 ug/L 99
37) trans-1,3-Dichloropropene	13.72	75	134145	20.73 ug/L 98
38) 1,1,2-Trichloroethane	13.94	83	64723	20.80 ug/L 100
40) Toluene	14.21	92	280289	20.95 ug/L 97
42) 1,3-Dichloropropane	14.27	76	130749	20.27 ug/L 97

(#) = qualifier out of range (m) = manual integration  
 03221102.D 031711.M Tue Mar 22 12:23:04 2011

139 of 285

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D Vial: 1  
 Acq On : 22 Mar 2011 6:58 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:22 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

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Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
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43) 2-Hexanone	14.46	43	48016	22.33	ug/L	# 95
44) Dibromochloromethane	14.64	129	79348	20.46	ug/L	99
45) 1,2-Dibromoethane	14.97	107	68544	21.17	ug/L	98
46) Tetrachloroethene	15.19	166	107256	20.98	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	88350	20.93	ug/L	95
48) Chlorobenzene	16.12	112	278995	20.83	ug/L	99
49) Ethylbenzene	16.37	91	531989	21.08	ug/L	100
50) m,p-Xylenes	16.63	106	189996	21.49	ug/L	98
51) Styrene	17.09	104	298392	22.26	ug/L	97
52) o-Xylene	17.19	106	177651	20.67	ug/L	100
55) Bromoform	16.81	173	40639	22.32	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	75679	20.56	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	17133	21.39	ug/L	96
58) Isopropylbenzene	17.69	105	445960	23.16	ug/L	99
59) Bromobenzene	18.04	156	99274	22.35	ug/L	100
60) n-Propylbenzene	18.29	91	632971	23.03	ug/L	100
61) 2-Chlorotoluene	18.44	91	362356	22.50	ug/L	100
62) 4-Chlorotoluene	18.54	91	359995	22.55	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	385893	23.19	ug/L	99
64) tert-Butylbenzene	19.08	119	328649	23.20	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	385130	23.03	ug/L	99
66) sec-Butylbenzene	19.38	105	558264	22.99	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	201609	22.27	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	200379	21.99	ug/L	99
69) p-Isopropyltoluene	19.60	119	438302	23.62	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	167826	21.32	ug/L	100
71) n-Butylbenzene	20.11	91	481225	23.30	ug/L	84
72) 1,2-Dibromo-3-chloropropan	20.58	157	9554	19.47	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	113985	22.42	ug/L	100
74) Naphthalene	22.62	128	138409	20.53	ug/L	97
75) Hexachlorobutadiene	22.68	225	76986	23.71	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	92238	22.25	ug/L	

Quantitation Report

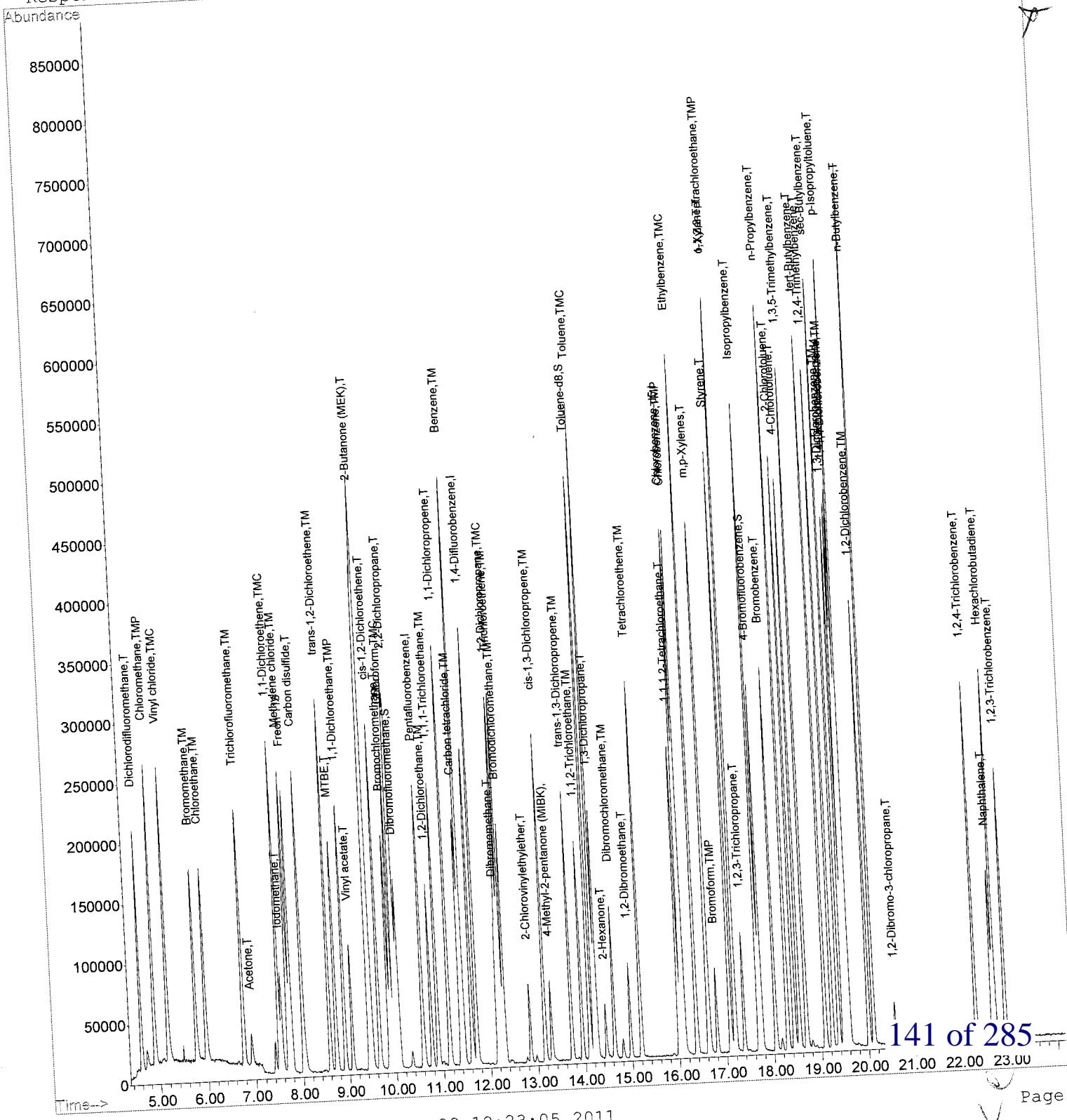
Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D  
 Acq On : 22 Mar 2011 6:58 am  
 Sample : 25 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:22 2011

Vial: 1  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221102.D



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D Vial: 1  
 Acq On : 22 Mar 2011 6:58 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

✓3/22/11

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	117	-0.01
2 T	Dichlorodifluoromethane	1.181	1.104	6.5	107	0.00
3 TMP	Chloromethane	1.953	1.747	10.5	105	0.00
4 TMC	Vinyl chloride	1.739	1.631	6.2	111	0.00
5 TM	Bromomethane	0.813	0.697	14.3	95	0.00
6 TM	Chloroethane	0.922	0.899	2.5	116	0.00
7 TM	Trichlorofluoromethane	1.209	1.133	6.3	102	0.00
8 T	Acetone	0.194	0.255	-31.4#	190	-0.01
9 T	Iodomethane	0.531	0.625	-17.7	123	0.00
10 TMC	1,1-Dichloroethene	0.705	0.595	15.6	103	0.00
11 TM	Methylene chloride	0.830	0.678	18.3	99	0.00
12	Freon 113	0.835	0.684	18.1	99	0.00
13 T	Carbon disulfide	2.509	2.519	-0.4	121	0.00
14 TM	trans-1,2-Dichloroethene	0.780	0.660	15.4	100	0.00
15 T	MTBE	1.333	1.099	17.6	99	0.00
16 TMP	1,1-Dichloroethane	1.628	1.345	17.4	98	0.00
17 T	Vinyl acetate	1.264	1.047	17.2	100	0.00
18 T	2-Butanone (MEK)	0.036	0.039#	-8.3	110	-0.01
19 T	cis-1,2-Dichloroethene	0.808	0.679	16.0	100	0.00
20 T	Bromochloromethane	0.296	0.256	13.5	104	0.00
21 TMC	Chloroform	1.343	1.113	17.1	98	0.00
22 T	2,2-Dichloropropane	1.089	0.961	11.8	103	0.00
23 S	Dibromofluoromethane	0.629	0.570	9.4	106	0.00
24 TM	1,2-Dichloroethane	0.820	0.684	16.6	97	-0.01
25 TM	1,1,1-Trichloroethane	0.964	0.846	12.2	101	0.00
26 I	1,4-Difluorobenzene	1.000	1.000	0.0	118	0.00
27 T	1,1-Dichloropropene	0.640	0.553	13.6	99	0.00
28 TM	Carbon tetrachloride	0.442	0.399	9.7	103	0.00
29 TM	Benzene	1.711	1.437	16.0	101	0.00
30 T	Dibromomethane	0.202	0.166	17.8	98	0.00
31 TMC	1,2-Dichloropropane	0.478	0.392	18.0	96	0.00
32 TM	Trichloroethene	0.428	0.361	15.7	100	-0.01
33 TM	Bromodichloromethane	0.502	0.426	15.1	97	0.00
34 T	2-Chlorovinylethylether	0.101	0.094#	6.9	111	0.00
35 TM	cis-1,3-Dichloropropene	0.610	0.508	16.7	95	0.00
36	4-Methyl-2-pentanone (MIBK)	0.250	0.213	14.8	102	0.00
37 TM	trans-1,3-Dichloropropene	0.471	0.390	17.2	95	0.00
38 TM	1,1,2-Trichloroethane	0.226	0.188	16.8	98	0.00
39 S	Toluene-d8	1.261	1.129	10.5	108	-0.01
40 TMC	Toluene	0.973	0.815	16.2	99	0.00
41 I	Chlorobenzene-d5	1.000	1.000	0.0	118	0.00
42 T	1,3-Dichloropropane	0.566	0.459	18.9	93	0.00
43 T	2-Hexanone	0.189	0.168	11.1	108	0.00
44 TM	Dibromochloromethane	0.340	0.278	18.2	97	0.00
45 T	1,2-Dibromoethane	0.284	0.240	15.5	97	0.00
46 TM	Tetrachloroethene	0.448	0.376	16.1	98	-0.01
47 T	1,1,1,2-Tetrachloroethane	0.370	0.310	16.2	101	0.00
48 TMP	Chlorobenzene	1.175	0.979	16.7	98	0.00

142 of 285

✓3/22/11

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D Vial: 1  
 Acq On : 22 Mar 2011 6:58 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 TMC	Ethylbenzene	2.214	1.866	15.7	99	0.00
50 T	m,p-Xylenes	0.775	0.667	13.9	102	0.00
51 T	Styrene	1.176	1.047	11.0	101	0.00
52 T	o-Xylene	0.754	0.623	17.4	100	0.00
53 S	4-Bromofluorobenzene	0.548	0.477	13.0	106	0.00
54	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00
55 TMP	Bromoform	0.362	0.323	10.8	96	0.00
56 TMP	1,1,2,2-Tetrachloroethane	0.732	0.602	17.8	92	0.00
57 T	1,2,3-Trichloropropane	0.159	0.136	14.5	91	0.00
58 T	Isopropylbenzene	3.828	3.547	7.3	100	0.00
59 T	Bromobenzene	0.883	0.790	10.5	94	0.00
60 T	n-Propylbenzene	5.465	5.034	7.9	100	0.00
61 T	2-Chlorotoluene	3.202	2.882	10.0	99	0.00
62 T	4-Chlorotoluene	3.174	2.863	9.8	98	0.00
63 T	1,3,5-Trimethylbenzene	3.308	3.069	7.2	101	0.00
64 T	tert-Butylbenzene	2.816	2.614	7.2	101	0.00
65 T	1,2,4-Trimethylbenzene	3.325	3.063	7.9	101	0.00
66 T	sec-Butylbenzene	4.827	4.440	8.0	100	0.00
67 TM	1,3-Dichlorobenzene	1.800	1.603	10.9	98	0.00
68 TM	1,4-Dichlorobenzene	1.812	1.594	12.0	99	0.00
69 T	p-Isopropyltoluene	3.690	3.486	5.5	101	0.00
70 TM	1,2-Dichlorobenzene	1.565	1.335	14.7	94	0.00
71 T	n-Butylbenzene	4.107	3.827	6.8	99	0.00
72 T	1,2-Dibromo-3-chloropropane	0.098	0.076#	22.4	84	0.00
73 T	1,2,4-Trichlorobenzene	1.011	0.907	10.3	93	0.00
74 T	Naphthalene	1.341	1.101	17.9	84	0.00
75 T	Hexachlorobutadiene	0.646	0.612	5.3	100	0.00
76 T	1,2,3-Trichlorobenzene	0.824	0.734	10.9	91	0.00

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D Vial: 2  
 Acq On : 22 Mar 2011 7:29 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:23 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator) 13/22/11

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	191208	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	335903	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	277118	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131814	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.08	113	111828	23.24	ug/L	0.00
Spiked Amount	25.000		Recovery	=	92.96%	
39) Toluene-d8	14.11	98	382232	22.56	ug/L	0.00
Spiked Amount	25.000		Recovery	=	90.24%	
53) 4-Bromofluorobenzene	17.74	95	134823	22.20	ug/L	0.00
Spiked Amount	25.000		Recovery	=	88.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	185855	20.57	ug/L	99
3) Chloromethane	4.89	50	261130	17.48	ug/L	98
4) Vinyl chloride	5.18	62	278784	20.97	ug/L	97
5) Bromomethane	5.77	94	143775	20.81	ug/L	98
6) Chloroethane	5.98	64	150093	21.29	ug/L	99
7) Trichlorofluoromethane	6.77	101	219743	23.77	ug/L	99
8) Acetone	6.93	43	34192	30.55	ug/L	98
9) Iodomethane	7.56	142	163900	38.27	ug/L	97
10) 1,1-Dichloroethene	7.50	96	138487	25.68	ug/L	98
11) Methylene chloride	7.70	84	156896	24.73	ug/L	99
12) Freon 113	7.77	101	156619	24.53	ug/L	100
13) Carbon disulfide	8.02	76	556252	28.99	ug/L	98
14) trans-1,2-Dichloroethene	8.59	96	125918	21.10	ug/L	99
15) MTBE	8.73	73	204242	20.03	ug/L	100
16) 1,1-Dichloroethane	8.91	63	255867	20.55	ug/L	99
17) Vinyl acetate	9.07	43	254923	26.37	ug/L	39
18) 2-Butanone (MEK)	9.46	72	7665	25.64	ug/L	98
19) cis-1,2-Dichloroethene	9.65	96	122782	19.87	ug/L	98
20) Bromochloromethane	9.87	128	47331	20.93	ug/L	99
21) Chloroform	9.93	83	207118	20.17	ug/L	99
22) 2,2-Dichloropropane	10.03	77	175307	21.05	ug/L	98
24) 1,2-Dichloroethane	10.77	62	130161	20.76	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	154419	20.94	ug/L	99
27) 1,1-Dichloropropene	11.14	75	180517	20.99	ug/L	100
28) Carbon tetrachloride	11.38	117	127362	21.45	ug/L	100
29) Benzene	11.43	78	463066	20.14	ug/L	97
30) Dibromomethane	12.16	93	57299	21.07	ug/L	100
31) 1,2-Dichloropropane	12.21	63	133105	20.73	ug/L	99
32) Trichloroethene	12.26	95	119163	20.73	ug/L	99
33) Bromodichloromethane	12.32	83	143092	21.20	ug/L	99
34) 2-Chlorovinylethylether	12.85	63	38405	32.81	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	175276	21.40	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	78742	23.47	ug/L	98
37) trans-1,3-Dichloropropene	13.72	75	141343	22.36	ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	64276	21.15	ug/L	99
40) Toluene	14.20	92	264288	20.22	ug/L	97
42) 1,3-Dichloropropane	14.26	76	130902	20.88	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03221103.D 031711.M Tue Mar 22 12:23:46 2011

144 of 285

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D Vial: 2  
 Acq On : 22 Mar 2011 7:29 am Operator: LC  
 Sample : -BS1 Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

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Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	51395	24.58	ug/L #	96
44) Dibromochloromethane	14.64	129	81791	21.69	ug/L	99
45) 1,2-Dibromoethane	14.97	107	67085	21.31	ug/L	99
46) Tetrachloroethene	15.20	166	103121	20.75	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.00	131	85361	20.80	ug/L	97
48) Chlorobenzene	16.11	112	269306	20.68	ug/L	99
49) Ethylbenzene	16.37	91	507210	20.67	ug/L	100
50) m,p-Xylenes	16.63	106	178224	20.74	ug/L	100
51) Styrene	17.08	104	281281	21.58	ug/L	97
52) o-Xylene	17.19	106	169756	20.32	ug/L	99
55) Bromoform	16.81	173	42245	22.13	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	82776	21.45	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18263	21.75	ug/L	99
58) Isopropylbenzene	17.68	105	462333	22.91	ug/L	100
59) Bromobenzene	18.05	156	98403	21.13	ug/L	100
60) n-Propylbenzene	18.29	91	627134	21.76	ug/L	99
61) 2-Chlorotoluene	18.44	91	344737	20.42	ug/L	99
62) 4-Chlorotoluene	18.55	91	357127	21.34	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	373785	21.43	ug/L	99
64) tert-Butylbenzene	19.09	119	312181	21.02	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	384657	21.94	ug/L	99
66) sec-Butylbenzene	19.37	105	534899	21.02	ug/L	99
67) 1,3-Dichlorobenzene	19.47	146	198414	20.91	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	199251	20.86	ug/L	99
69) p-Isopropyltoluene	19.60	119	426160	21.91	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	171672	20.80	ug/L	99
71) n-Butylbenzene	20.11	91	477436	22.05	ug/L	92
72) 1,2-Dibromo-3-chloropropan	20.57	157	11019	21.42	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	126767	23.78	ug/L	100
74) Naphthalene	22.62	128	169482	23.98	ug/L	99
75) Hexachlorobutadiene	22.68	225	74923	22.01	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	103262	23.76	ug/L	

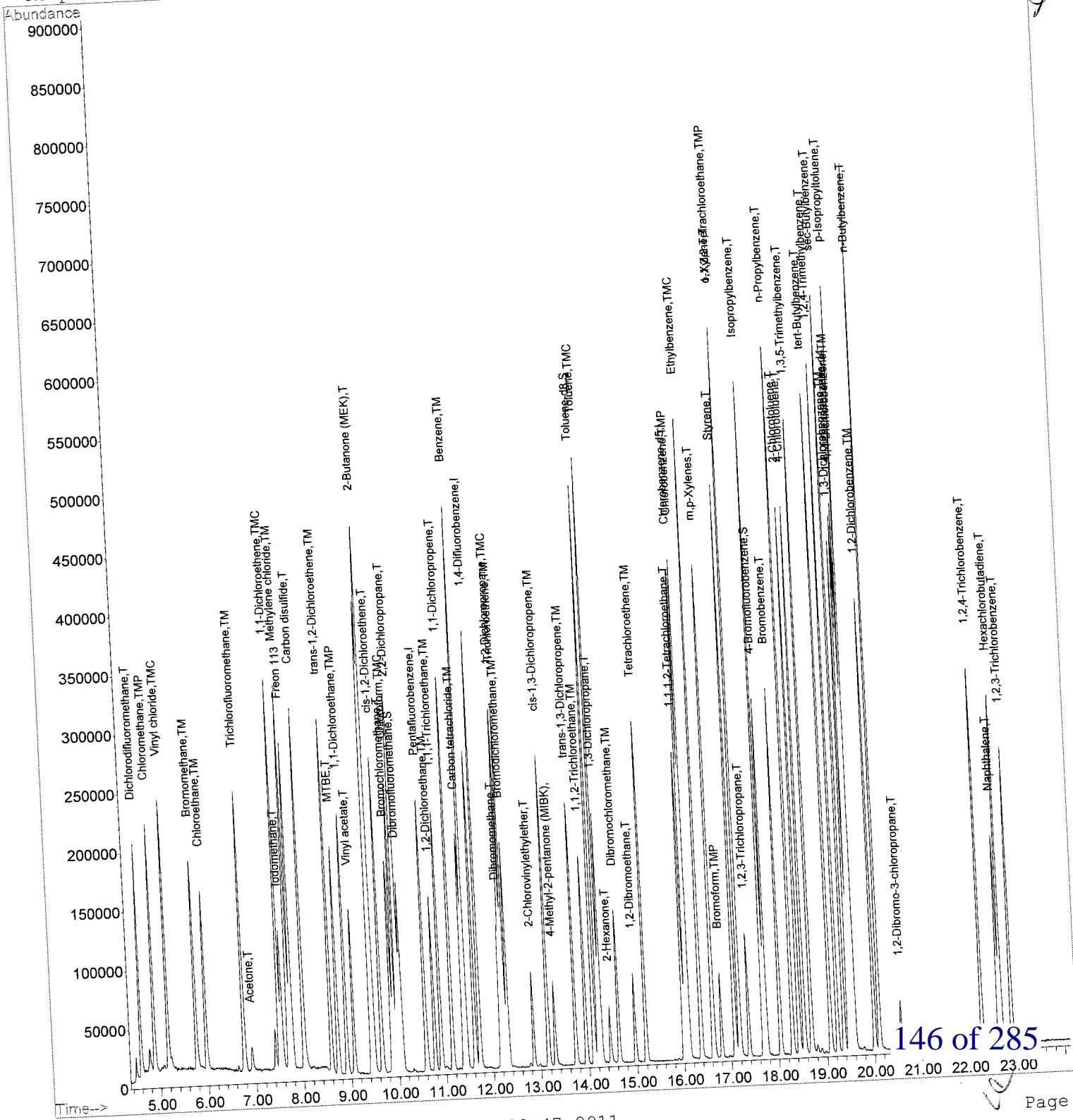
145 of 285

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Page 2

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D      Vial: 2  
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 Sample : -BS1      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011      Quant Results File: 031711.RES  
 Response via : Initial Calibration      Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration      TIC: 03221103.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D Vial: 3  
 Acq On : 22 Mar 2011 8:00 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:23 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

✓ 3/22/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193281	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	333677	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	278307	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127803	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.08	113	111706	22.97	ug/L	0.00
Spiked Amount			Recovery	=	91.88%	
39) Toluene-d8	14.11	98	377394	22.43	ug/L	0.00
Spiked Amount			Recovery	=	89.72%	
53) 4-Bromofluorobenzene	17.74	95	135668	22.24	ug/L	0.00
Spiked Amount			Recovery	=	88.96%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	175198	19.19	ug/L	97
3) Chloromethane	4.89	50	249111	16.50	ug/L	99
4) Vinyl chloride	5.17	62	258846	19.26	ug/L	100
5) Bromomethane	5.77	94	127292	18.26	ug/L	100
6) Chloroethane	5.97	64	141552	19.86	ug/L	99
7) Trichlorofluoromethane	6.77	101	211288	22.61	ug/L	99
8) Acetone	6.93	43	32363	28.36	ug/L	100
9) Iodomethane	7.56	142	107319	24.84	ug/L	100
10) 1,1-Dichloroethene	7.51	96	109072	20.01	ug/L	99
11) Methylene chloride	7.70	84	127679	19.91	ug/L	96
12) Freon 113	7.77	101	124317	19.26	ug/L	98
13) Carbon disulfide	8.02	76	455884	23.50	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	122191	20.26	ug/L	99
15) MTBE	8.73	73	207196	20.10	ug/L	100
16) 1,1-Dichloroethane	8.91	63	251637	20.00	ug/L	100
17) Vinyl acetate	9.07	43	255285	26.12	ug/L	100
18) 2-Butanone (MEK)	9.47	72	7029	23.34	ug/L	54
19) cis-1,2-Dichloroethene	9.65	96	121582	19.46	ug/L	98
20) Bromochloromethane	9.86	128	47600	20.82	ug/L	100
21) Chloroform	9.92	83	203645	19.61	ug/L	99
22) 2,2-Dichloropropane	10.03	77	171151	20.33	ug/L	99
24) 1,2-Dichloroethane	10.77	62	127678	20.15	ug/L	98
25) 1,1,1-Trichloroethane	10.90	97	154276	20.69	ug/L	100
27) 1,1-Dichloropropene	11.14	75	178405	20.89	ug/L	99
28) Carbon tetrachloride	11.38	117	125187	21.23	ug/L	99
29) Benzene	11.43	78	456385	19.99	ug/L	98
30) Dibromomethane	12.16	93	58620	21.70	ug/L	100
31) 1,2-Dichloropropane	12.20	63	133665	20.96	ug/L	99
32) Trichloroethene	12.26	95	115085	20.15	ug/L	99
33) Bromodichloromethane	12.32	83	140890	21.02	ug/L	99
34) 2-Chlorovinylethylether	12.85	63	32867	28.05	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	172517	21.20	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	77918	23.38	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	136555	21.74	ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	62074	20.56	ug/L	98
40) Toluene	14.20	92	260428	20.06	ug/L	99
42) 1,3-Dichloropropane	14.26	76	131189	20.83	ug/L	96

✓ 3/22/11  
147 of 285

(#) = qualifier out of range (m) = manual integration  
 03221104.D 031711.M Tue Mar 22 12:24:02 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D Vial: 3  
 Acq On : 22 Mar 2011 8:00 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:23 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

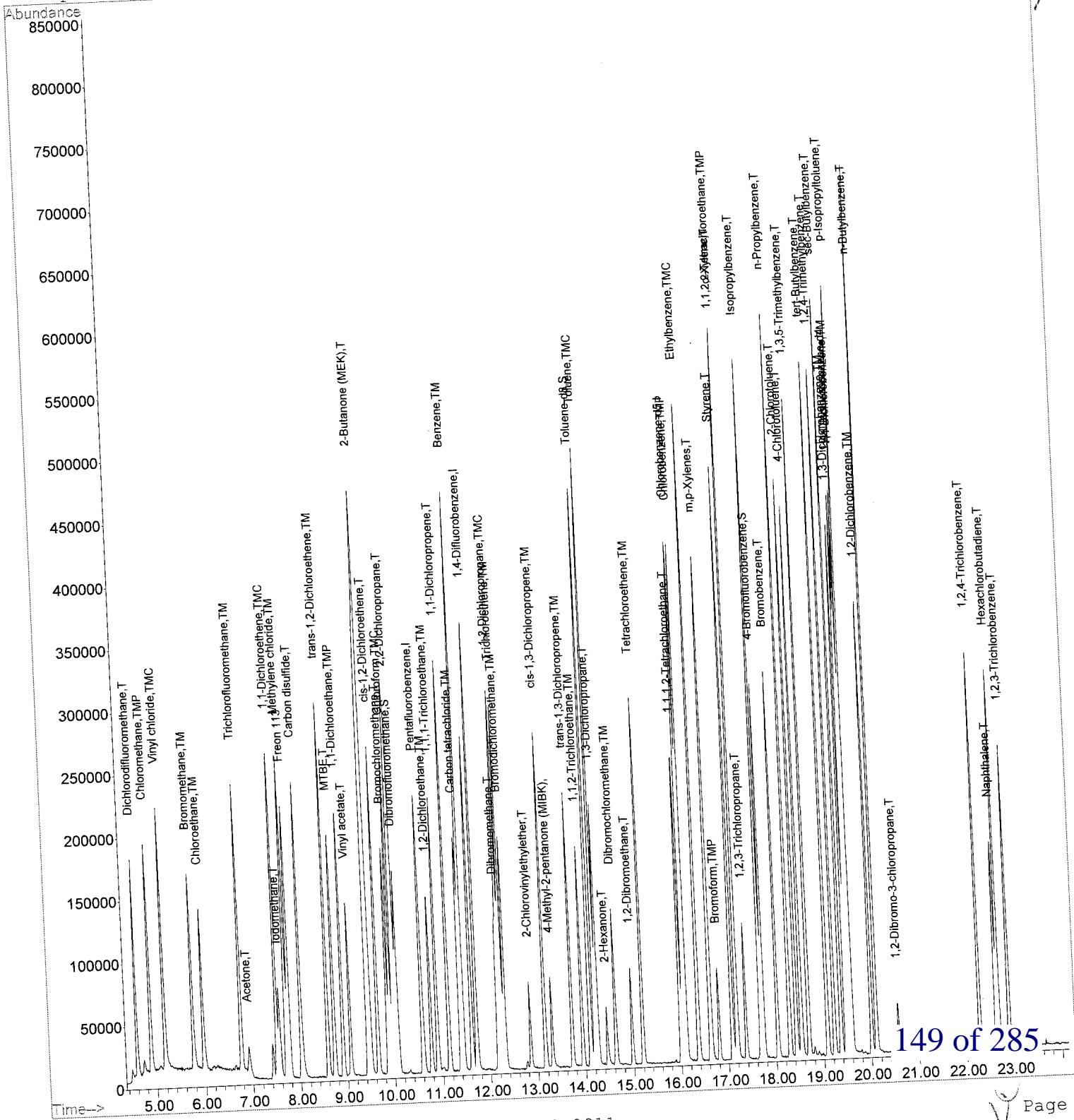
Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	48696	23.19	ug/L	# 93
44) Dibromochloromethane	14.64	129	78703	20.78	ug/L	99
45) 1,2-Dibromoethane	14.97	107	65715	20.79	ug/L	96
46) Tetrachloroethene	15.20	166	101150	20.26	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	84360	20.47	ug/L	97
48) Chlorobenzene	16.11	112	262002	20.03	ug/L	100
49) Ethylbenzene	16.37	91	493385	20.02	ug/L	100
50) m,p-Xylenes	16.63	106	173014	20.05	ug/L	99
51) Styrene	17.09	104	279919	21.38	ug/L	98
52) o-Xylene	17.19	106	164451	19.60	ug/L	99
55) Bromoform	16.81	173	42463	22.95	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.17	83	81875	21.88	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	18389	22.59	ug/L	100
58) Isopropylbenzene	17.69	105	455666	23.28	ug/L	99
59) Bromobenzene	18.04	156	99317	22.00	ug/L	100
60) n-Propylbenzene	18.29	91	609145	21.80	ug/L	100
61) 2-Chlorotoluene	18.44	91	336952	20.59	ug/L	99
62) 4-Chlorotoluene	18.55	91	347985	21.45	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	363351	21.49	ug/L	99
64) tert-Butylbenzene	19.08	119	306891	21.32	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	368260	21.66	ug/L	100
66) sec-Butylbenzene	19.38	105	518229	21.00	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	195249	21.22	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	197785	21.35	ug/L	100
69) p-Isopropyltoluene	19.60	119	413056	21.90	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	169697	21.21	ug/L	100
71) n-Butylbenzene	20.11	91	461412	21.98	ug/L	94
72) 1,2-Dibromo-3-chloropropan	20.57	157	11169	22.40	ug/L	98
73) 1,2,4-Trichlorobenzene	22.27	180	125162	24.22	ug/L	100
74) Naphthalene	22.62	128	164549	24.01	ug/L	100
75) Hexachlorobutadiene	22.68	225	74058	22.44	ug/L	99
76) 1,2,3-Trichlorobenzene	22.89	180	98292	23.33	ug/L	

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D      Vial: 3  
 Acq On : 22 Mar 2011 8:00 am      Operator: LC  
 Sample : -BSD1      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:23 2011  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221104.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221105.D Vial: 4  
 Acq On : 22 Mar 2011 8:31 am Operator: LC  
 Sample : -BLK1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:24 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator) *✓ 3/22/11*

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	191048	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	334286	25.00	ug/L	-0.01
41) Chlorobenzene-d5	16.07	117	277168	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.52	152	127354	25.00	ug/L	-0.01
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	109727	22.83	ug/L	-0.01
Spiked Amount 25.000			Recovery =	91.32%		
39) Toluene-d8	14.11	98	381083	22.60	ug/L	-0.01
Spiked Amount 25.000			Recovery =	90.40%		
53) 4-Bromofluorobenzene	17.74	95	133747	22.02	ug/L	-0.01
Spiked Amount 25.000			Recovery =	88.08%		
Target Compounds				Qvalue		
5) Bromomethane	5.77	94	900	0.39	ug/L	#24/n=31
8) Acetone	6.98	43	1800	Below Cal	#	48
9) Iodomethane	7.55	142	130	0.16	ug/L	# 32
24) 1,2-Dichloroethane	10.59	62	985	0.16	ug/L	# 1
73) 1,2,4-Trichlorobenzene	22.29	180	891	0.17	ug/L	87
74) Naphthalene	22.62	128	8874	1.30	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	993	0.24	ug/L	89

(#) = qualifier out of range (m) = manual integration  
 03221105.D 031711.M Tue Mar 22 12:24:24 2011

150 of 285

✓

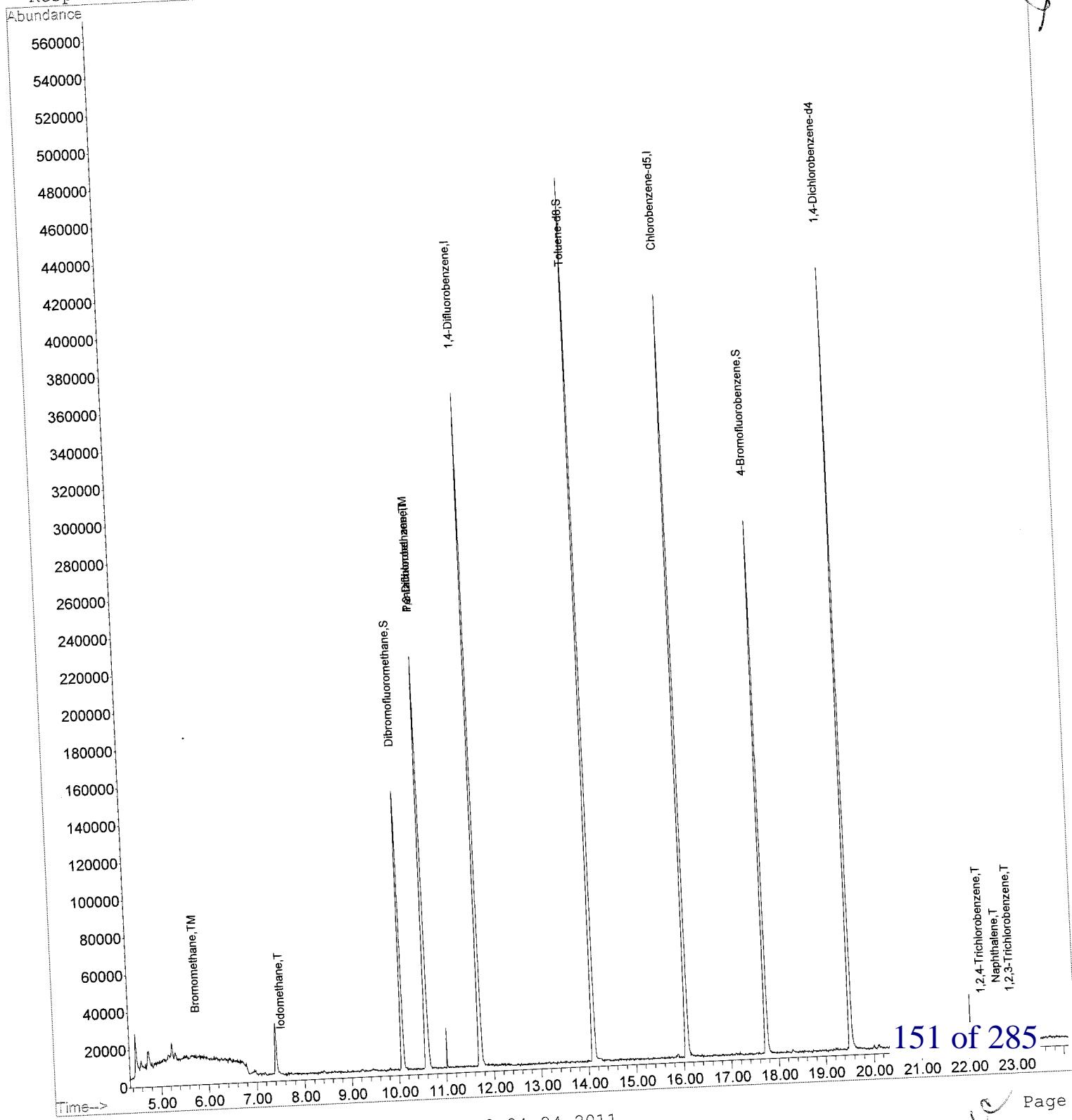
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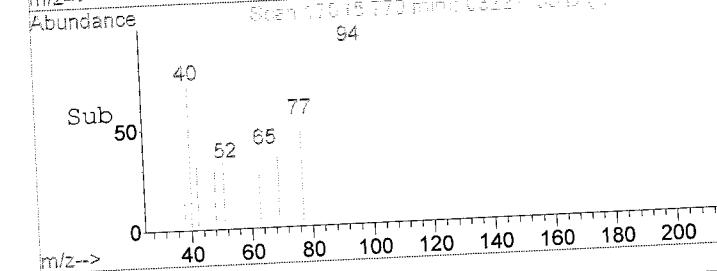
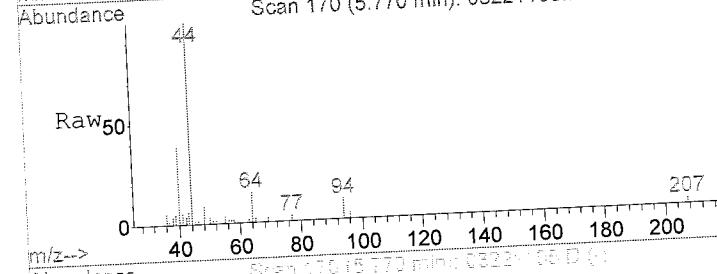
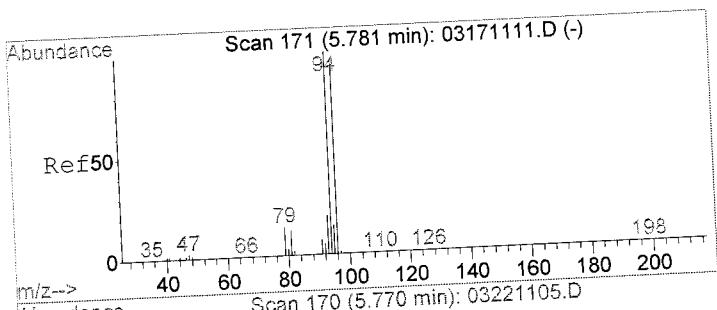
## Quantitation Report

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 Sample : -BLK1      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P      Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:24 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

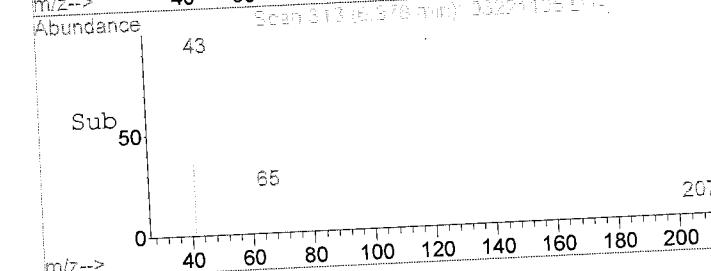
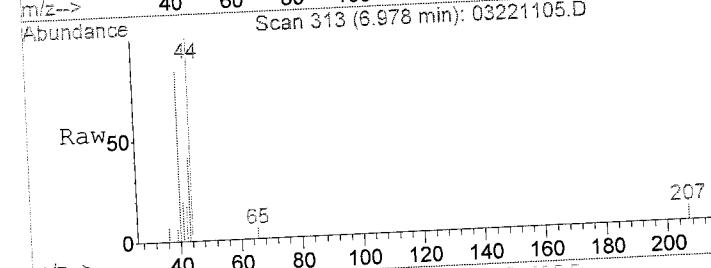
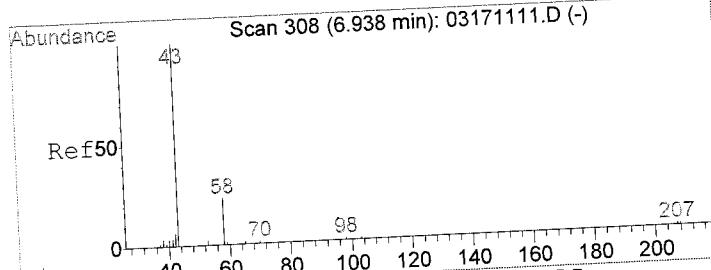
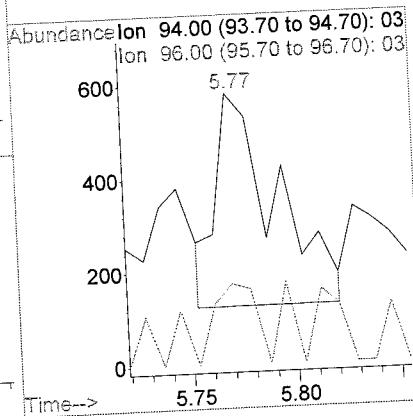
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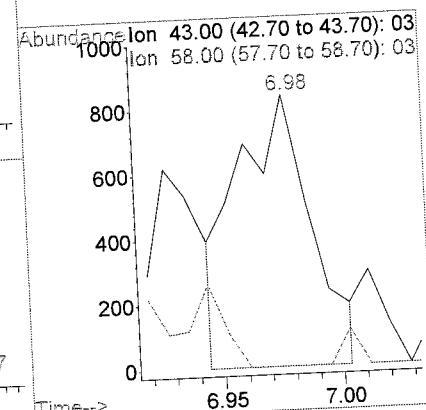
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Acq: 22 Mar 2011 8:31 am

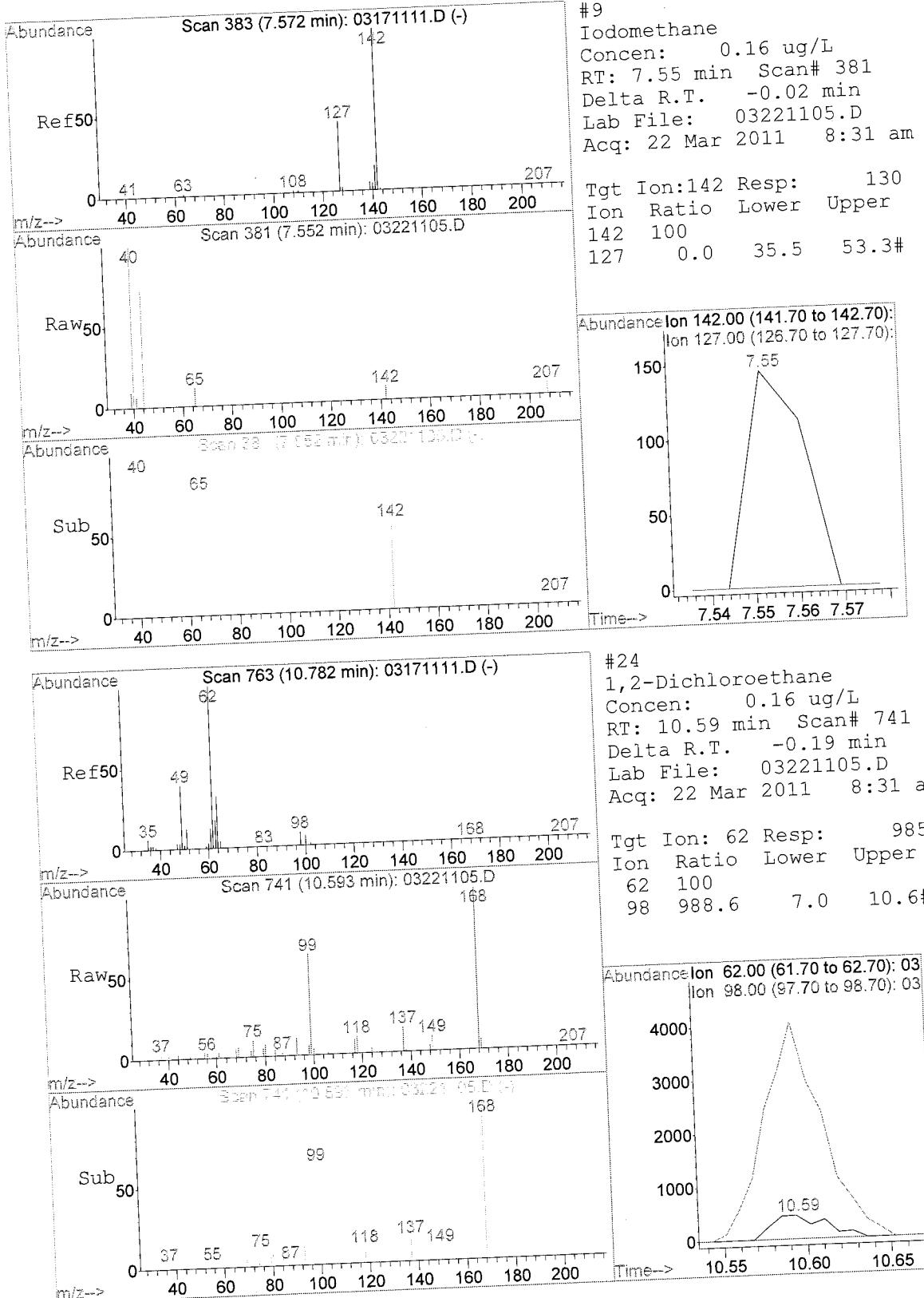
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94 100  
96 26.1 74.0 111.0#



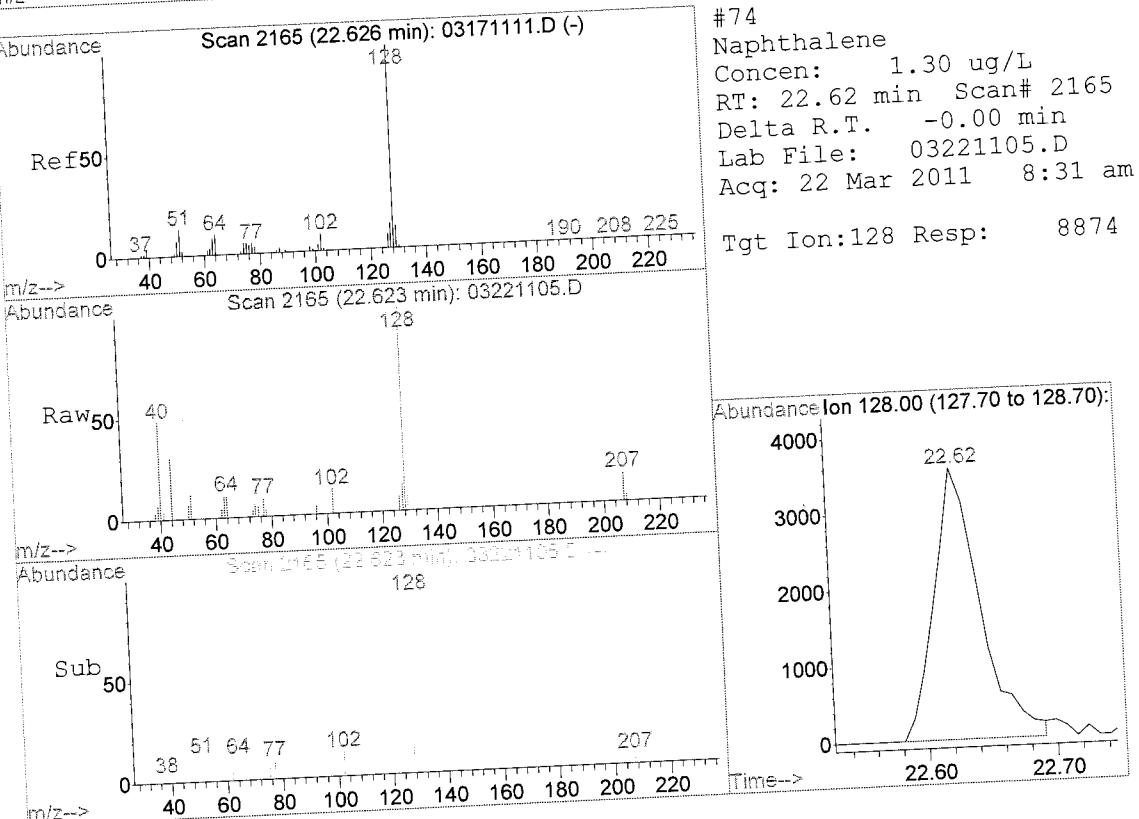
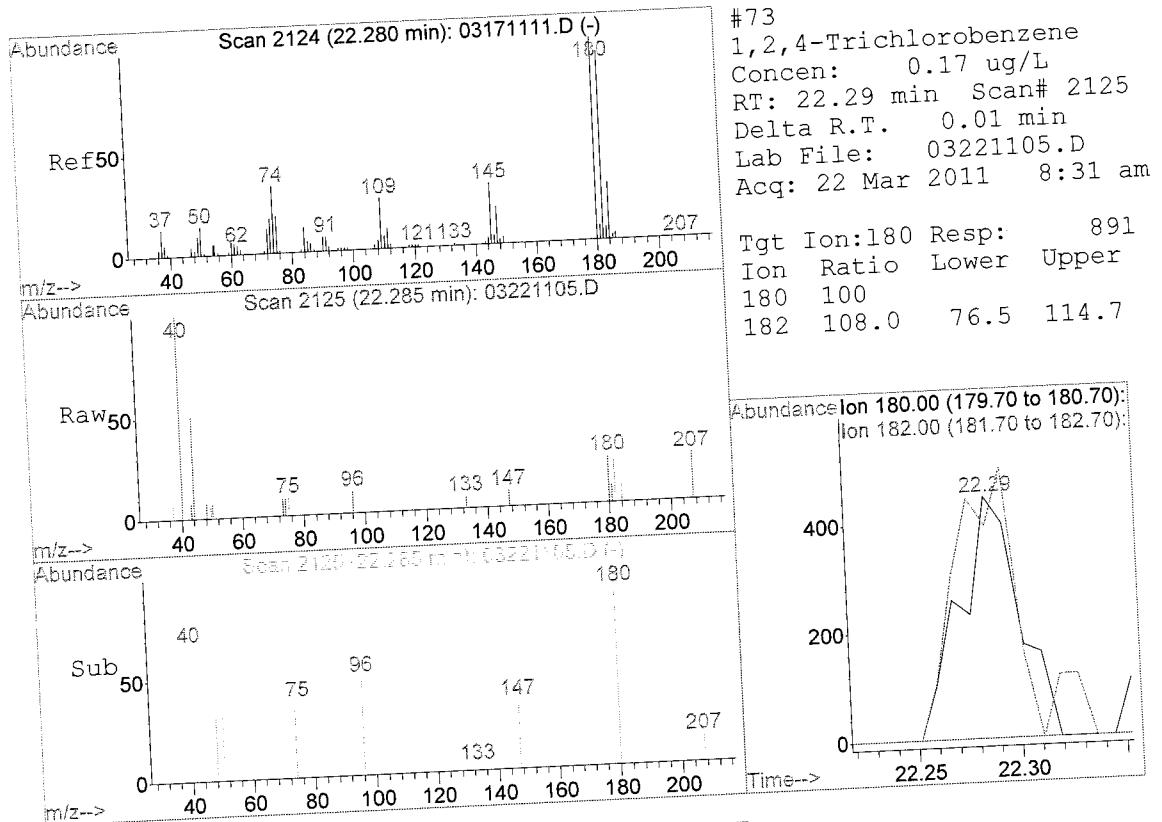
#8  
Acetone  
Concen: Below Cal  
RT: 6.98 min Scan# 313  
Delta R.T. 0.04 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

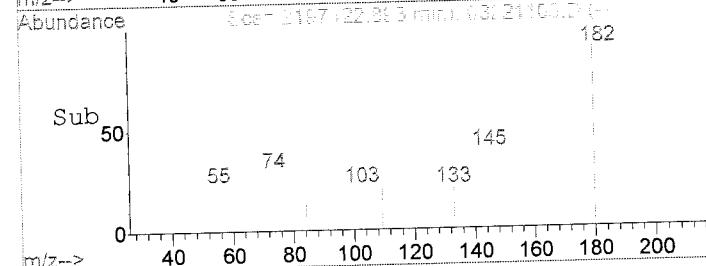
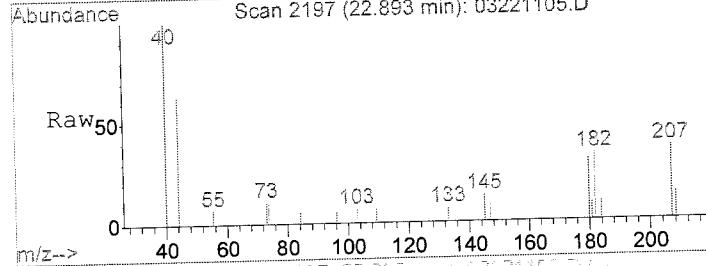
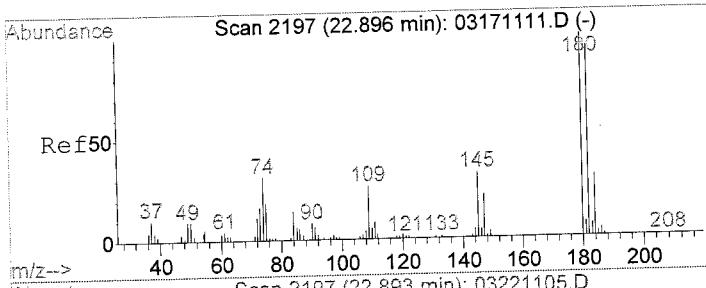
Tgt Ion: 43 Resp: 1800  
Ion Ratio Lower Upper  
43 100  
58 0.0 21.2 31.8#





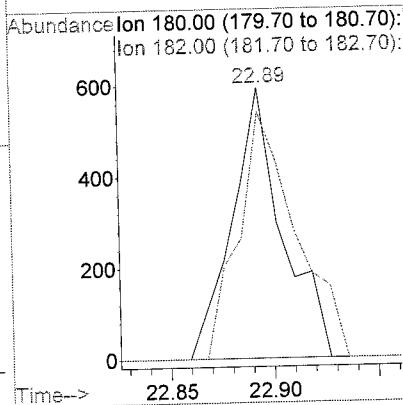
153 of 285  
V





#76  
1,2,3-Trichlorobenzene  
Concen: 0.24 ug/L  
RT: 22.89 min Scan# 2197  
Delta R.T. -0.00 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

Tgt Ion:180 Resp: 993  
Ion Ratio Lower Upper  
180 100  
182 105.3 76.1 114.1



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221108.D Vial: 7  
 Acq On : 22 Mar 2011 10:03 am Operator: LC  
 Sample : PUC0982-02 Inst : GCMS7  
 Misc : SOURCE Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:25 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/22/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	188150	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	330789	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	278096	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127366	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	109514	23.13	ug/L	0.00
Spiked Amount	25.000		Recovery	=	92.52%	
39) Toluene-d8	14.11	98	376684	22.58	ug/L	0.00
Spiked Amount	25.000		Recovery	=	90.32%	
53) 4-Bromofluorobenzene	17.74	95	130058	21.34	ug/L	0.00
Spiked Amount	25.000		Recovery	=	85.36%	
<b>Target Compounds</b>						
5) Bromomethane	5.81	94	106	0.27	ug/L	NSM 99
7) Trichlorofluoromethane	6.78	101	1147	0.13	ug/L	L2P/N 95 J
8) Acetone	6.94	43	1256	Below Cal #		
10) 1,1-Dichloroethene	7.50	96	14372	2.71	ug/L	92
15) MTBE	8.74	73	1363	0.14	ug/L	#spkr 81 J
16) 1,1-Dichloroethane	8.91	63	23225	1.90	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	11914	1.96	ug/L	99
21) Chloroform	9.93	83	14603	1.44	ug/L	96
32) Trichloroethene	12.26	95	44876	7.93	ug/L	99
42) 1,3-Dichloropropane	14.11	76	4370	0.69	ug/L	#spkr 72
46) Tetrachloroethene	15.21	166	2169	0.43	ug/L	L2P/N 90 J

Qvalue  
 NSM 99  
 L2P/N 95 J  
 # 67  
 #spkr 81 J  
 99  
 99  
 99  
 96  
 99  
 #spkr 72  
 L2P/N 90 J

156 of 285

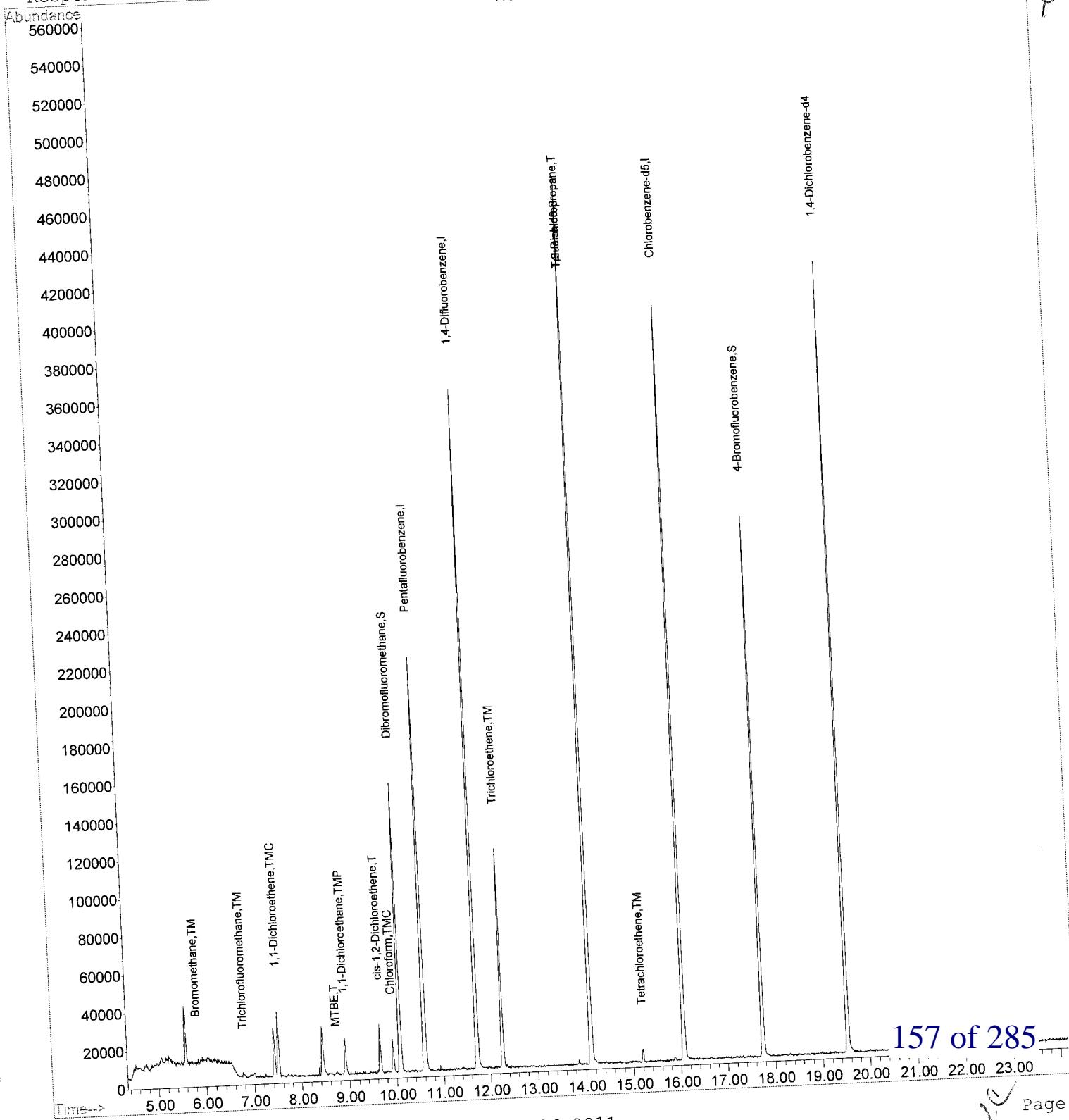
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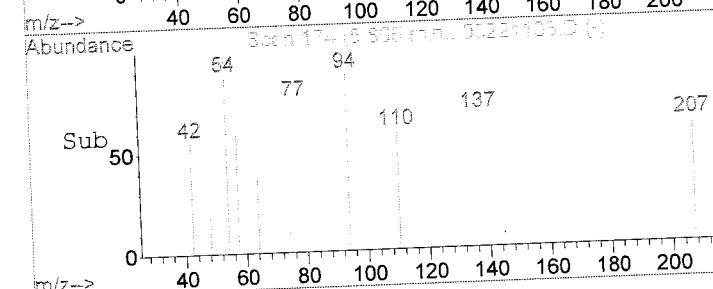
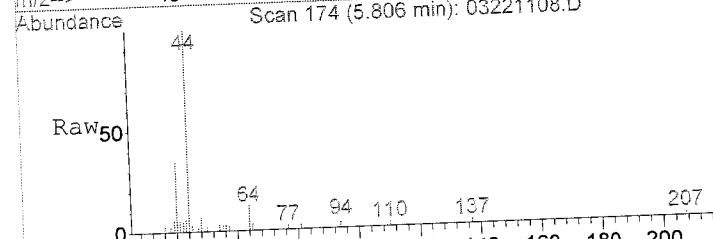
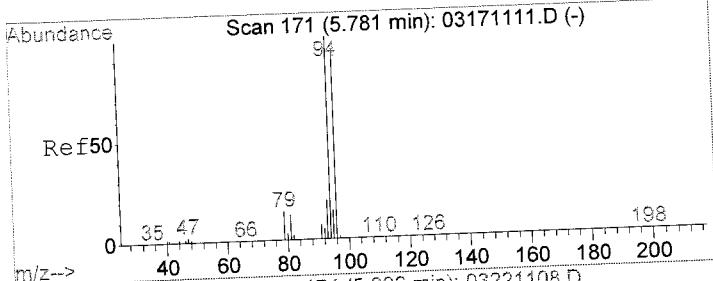
Page 1

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221108.D      Vial: 7  
 Acq On : 22 Mar 2011 10:03 am      Operator: LC  
 Sample : PUC0982-02      Inst : GCMS7  
 Misc : SOURCE      Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:25 2011      Quant Results File: 031711.RES  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221108.D

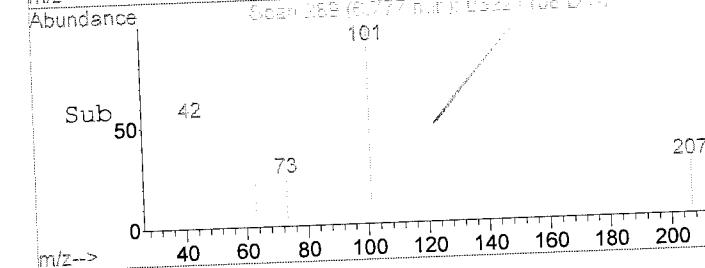
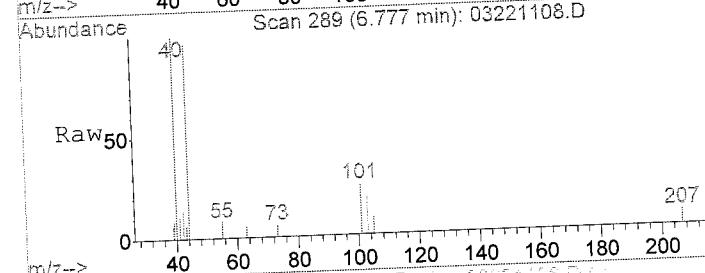
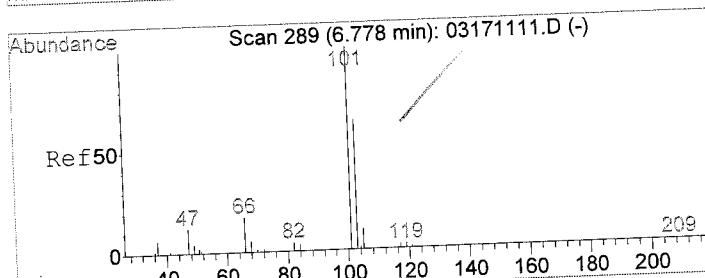
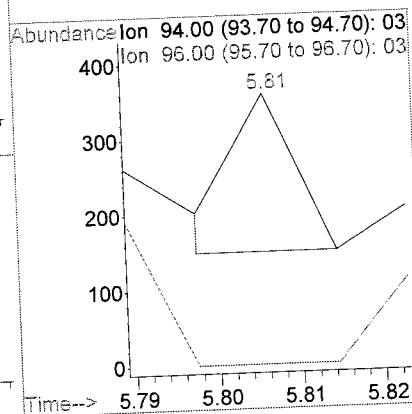




#5  
 Bromomethane  
 Concen: 0.27 ug/L  
 RT: 5.81 min Scan# 174  
 Delta R.T. 0.03 min  
 Lab File: 03221108.D  
 Acq: 22 Mar 2011 10:03 am

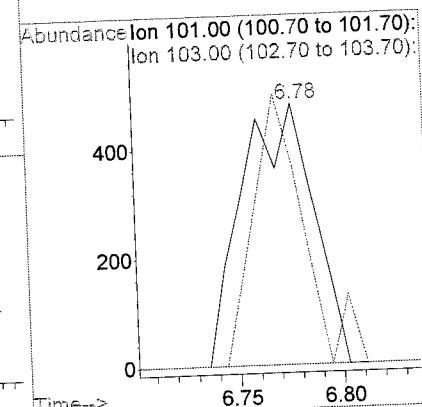
Tgt Ion: 94 Resp: 106  
 Ion Ratio Lower Upper  
 94 100  
 96 91.5 74.0 111.0

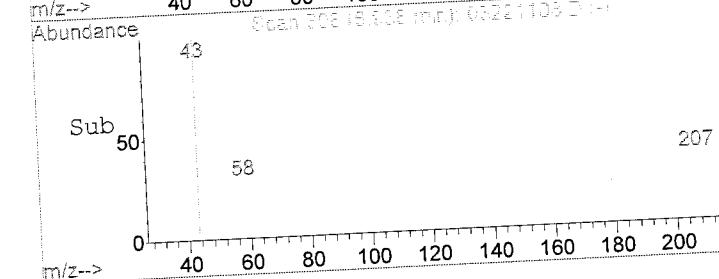
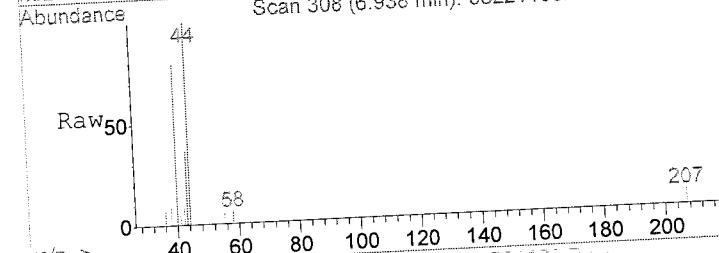
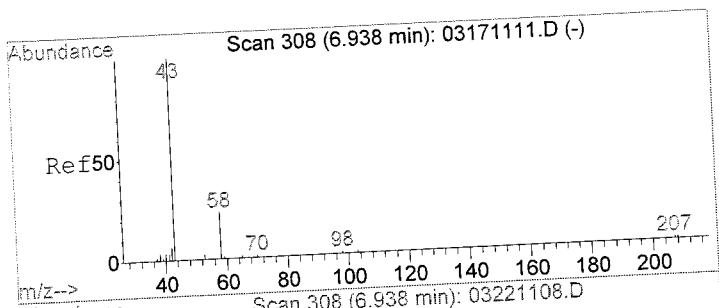
*WSM*



#7  
 Trichlorofluoromethane  
 Concen: 0.13 ug/L  
 RT: 6.78 min Scan# 289  
 Delta R.T. -0.00 min  
 Lab File: 03221108.D  
 Acq: 22 Mar 2011 10:03 am

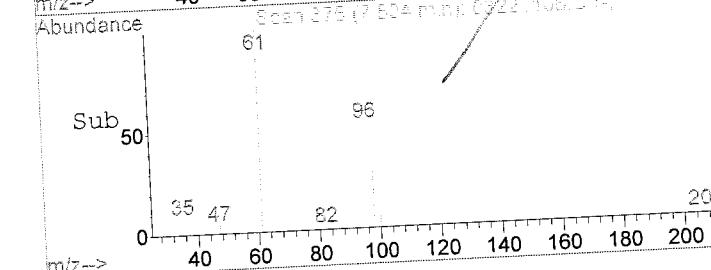
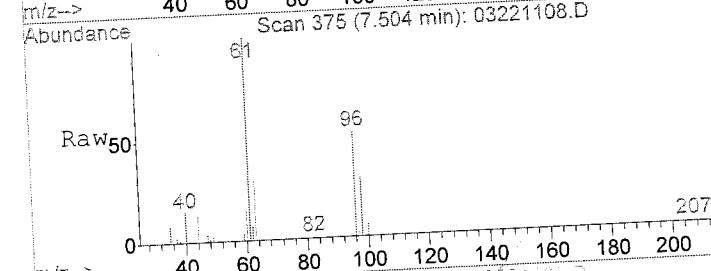
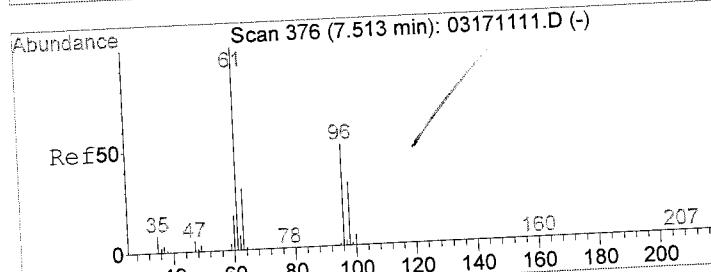
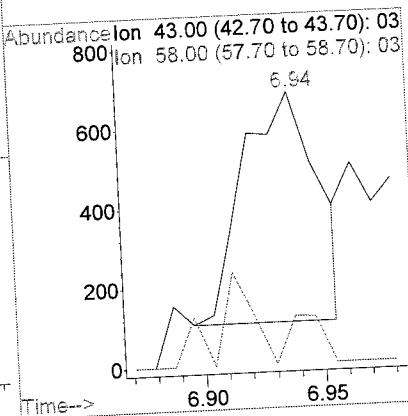
Tgt Ion: 101 Resp: 1147  
 Ion Ratio Lower Upper  
 101 100  
 103 67.3 50.7 76.1





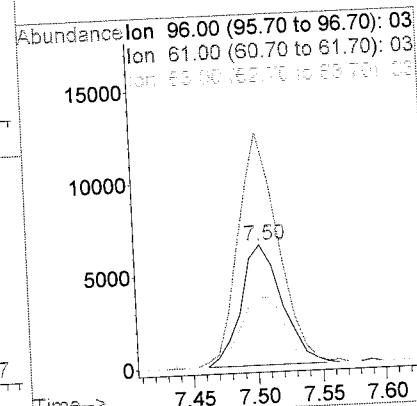
#8  
Acetone  
Concen: Below Cal  
RT: 6.94 min Scan# 308  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

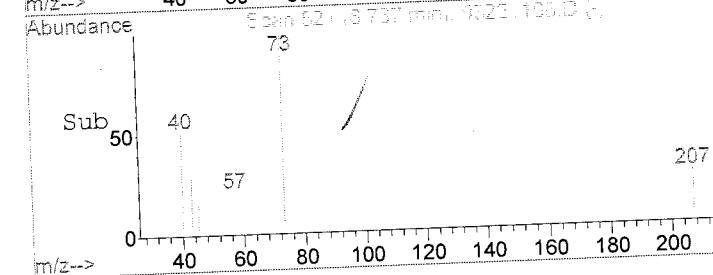
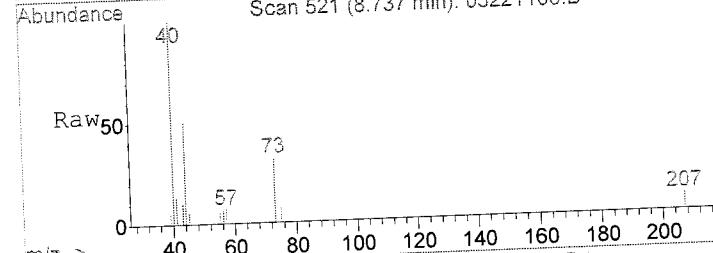
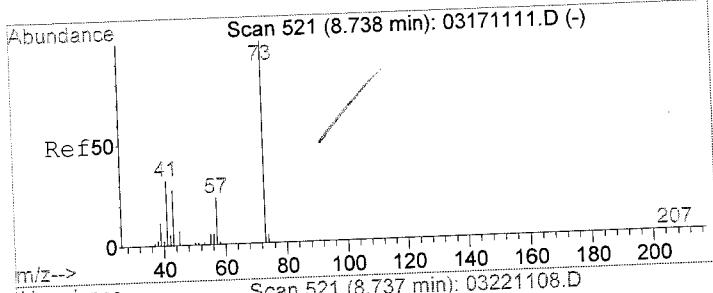
Tgt Ion: 43 Resp: 1256  
Ion Ratio Lower Upper  
43 100  
58 9.6 21.2 31.8#



#10  
1,1-Dichloroethene  
Concen: 2.71 ug/L  
RT: 7.50 min Scan# 375  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

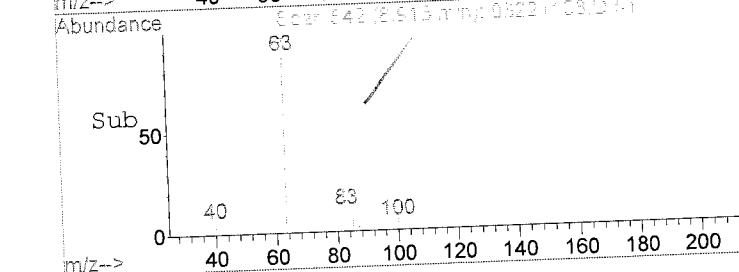
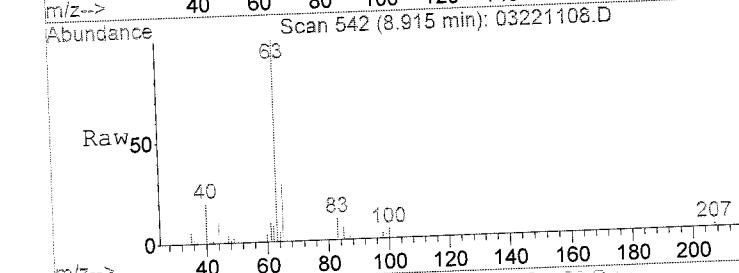
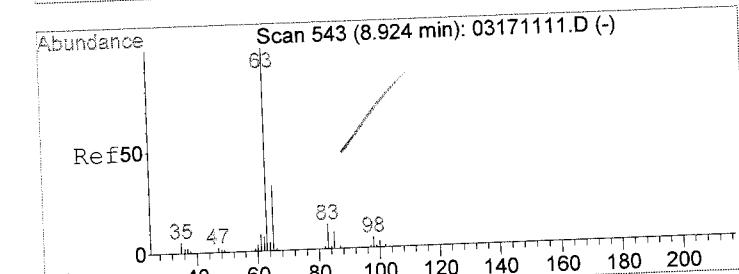
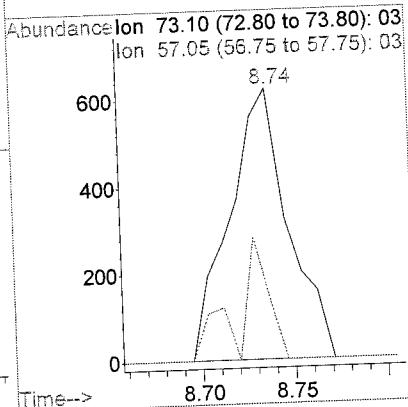
Tgt Ion: 96 Resp: 14372  
Ion Ratio Lower Upper  
96 100  
61 186.4 160.7 241.1  
63 61.2 50.9 76.3





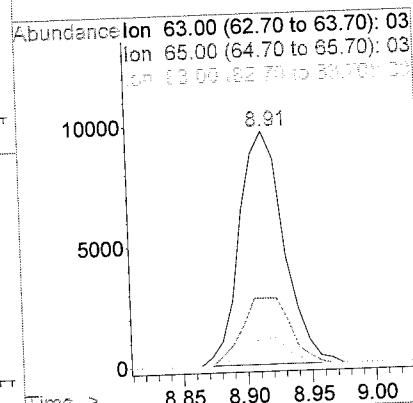
#15  
MTBE  
Concen: 0.14 ug/L  
RT: 8.74 min Scan# 521  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

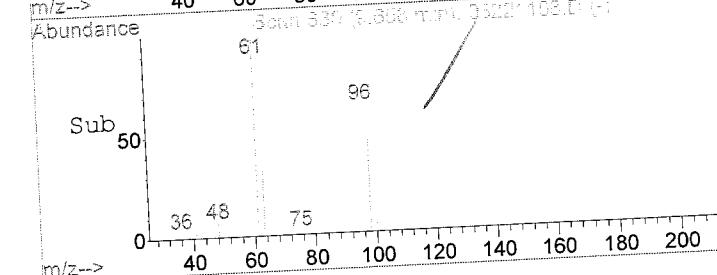
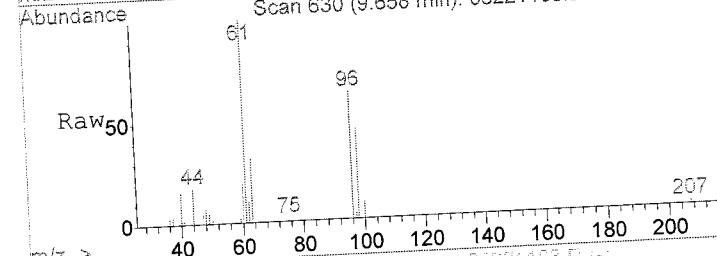
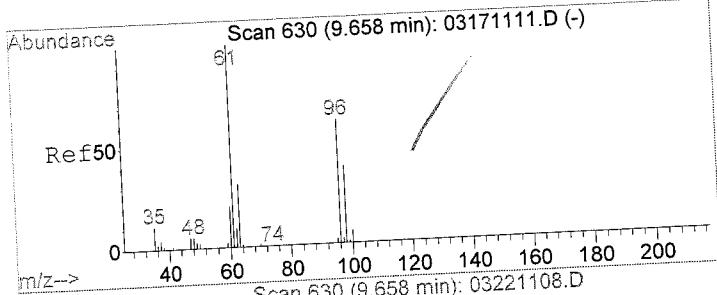
Tgt Ion: 73 Resp: 1363  
Ion Ratio Lower Upper  
73 100  
57 15.4 20.0 30.0#



#16  
1,1-Dichloroethane  
Concen: 1.90 ug/L  
RT: 8.91 min Scan# 542  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 63 Resp: 23225  
Ion Ratio Lower Upper  
63 100  
65 31.1 25.2 37.8  
83 11.1 9.2 13.8

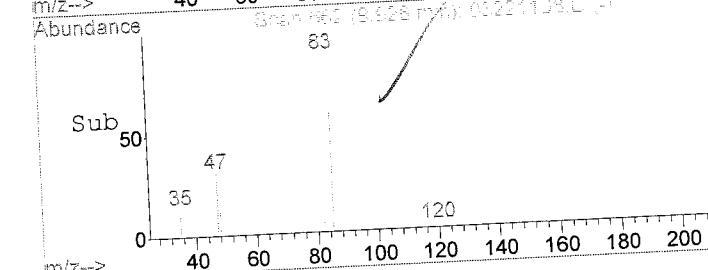
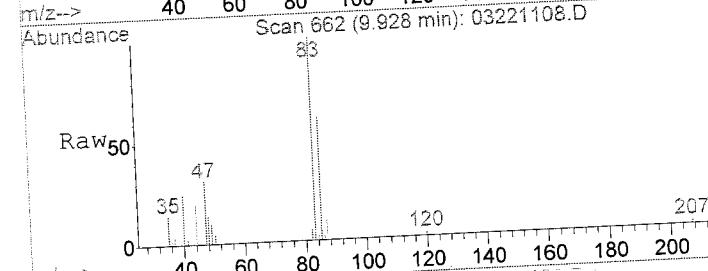
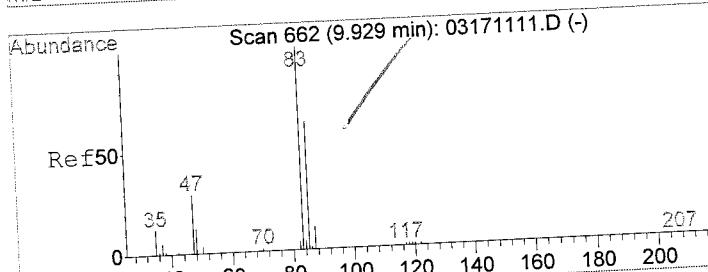
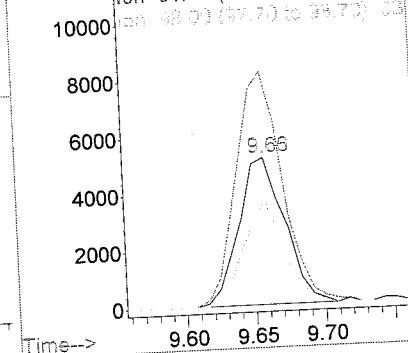




#19  
*cis-1,2-Dichloroethene*  
 Concen: 1.96 ug/L  
 RT: 9.66 min Scan# 630  
 Delta R.T. -0.00 min  
 Lab File: 03221108.D  
 Acq: 22 Mar 2011 10:03 am

Tgt Ion: 96 Resp: 11914  
 Ion Ratio Lower Upper  
 96 100  
 61 159.6 128.5 192.7  
 98 62.5 49.9 74.9

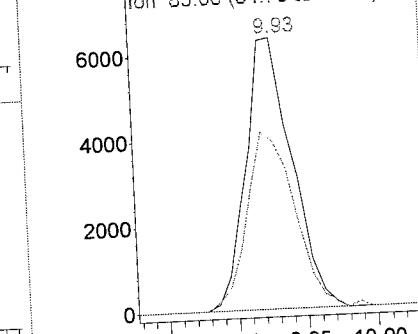
Abundance Ion 96.00 (95.70 to 96.70): 03  
 Ion 61.00 (60.70 to 61.70): 03

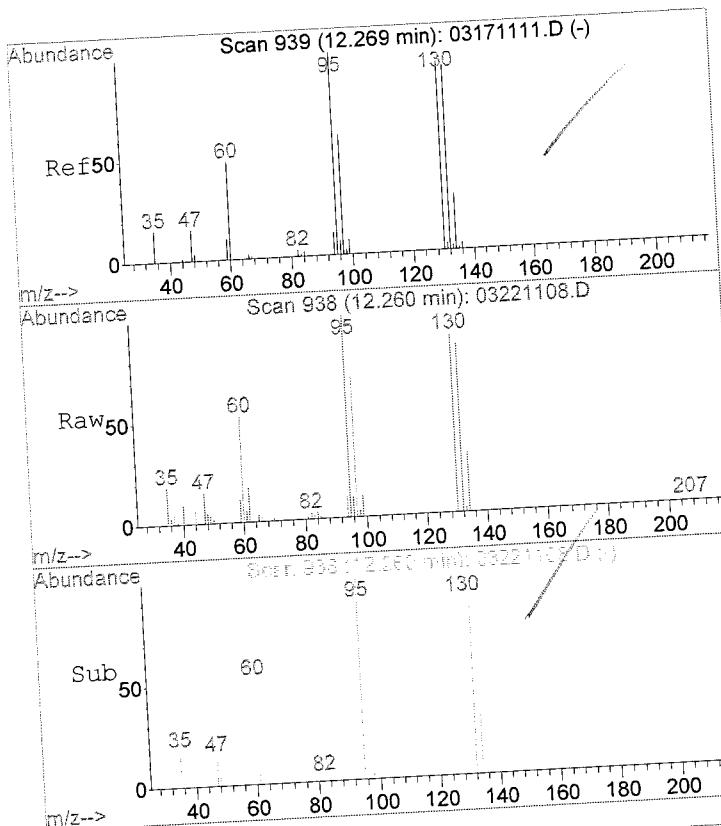


#21  
 Chloroform  
 Concen: 1.44 ug/L  
 RT: 9.93 min Scan# 662  
 Delta R.T. -0.00 min  
 Lab File: 03221108.D  
 Acq: 22 Mar 2011 10:03 am

Tgt Ion: 83 Resp: 14603  
 Ion Ratio Lower Upper  
 83 100  
 85 67.9 51.6 77.4

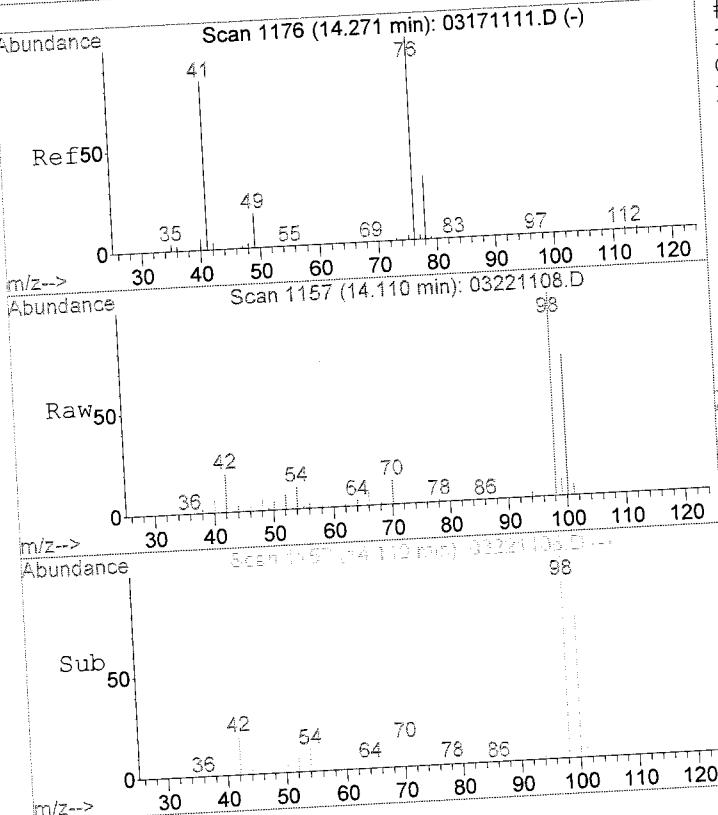
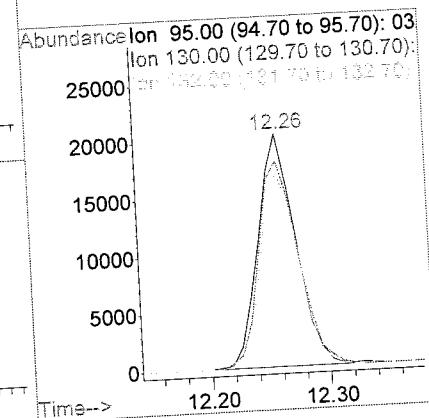
Abundance Ion 83.00 (82.70 to 83.70): 03  
 Ion 85.00 (84.70 to 85.70): 03





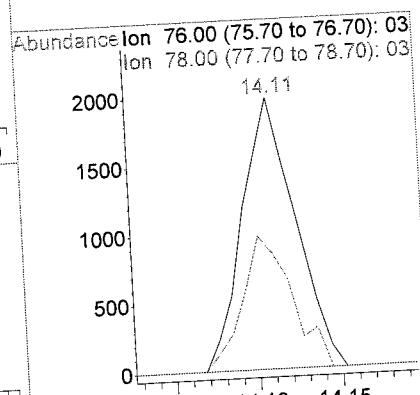
#32  
Trichloroethene  
Concen: 7.93 ug/L  
RT: 12.26 min Scan# 938  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

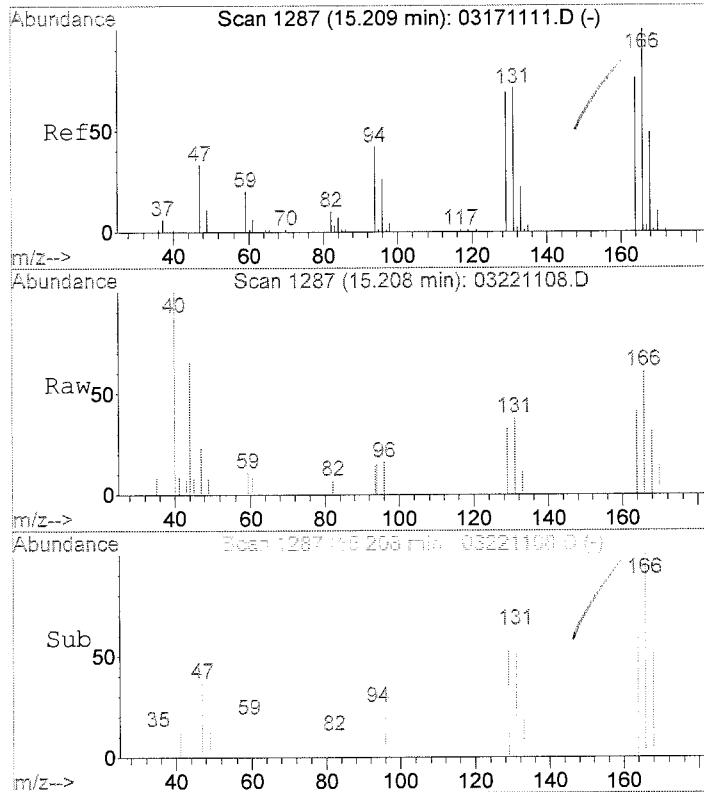
Tgt Ion: 95 Resp: 44876  
Ion Ratio Lower Upper  
95 100  
130 93.0 74.2 111.4  
132 86.5 70.8 106.2



#42  
1,3-Dichloropropane  
Concen: 0.69 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

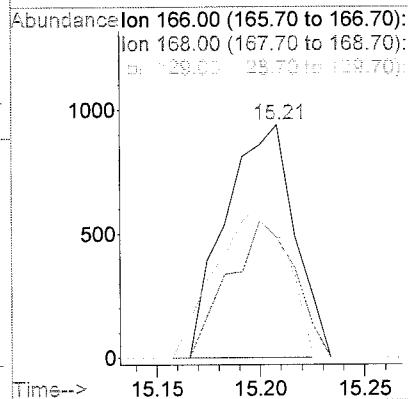
Tgt Ion: 76 Resp: 4370  
Ion Ratio Lower Upper  
76 100  
78 46.1 24.6 37.0#





#46  
Tetrachloroethene  
Concen: 0.43 ug/L  
RT: 15.21 min Scan# 1287  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion:166 Resp: 2169  
Ion Ratio Lower Upper  
166 100  
168 55.6 37.9 56.9  
129 67.3 59.8 89.8



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D Vial: 8  
 Acq On : 22 Mar 2011 10:34 am Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator) *✓ 3/22/11*

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	187013	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.71	114	325050	25.00	ug/L	-0.01
41) Chlorobenzene-d5	16.06	117	268038	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	124976	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	111044	23.60	ug/L	0.00
Spiked Amount 25.000			Recovery =	94.40%		
39) Toluene-d8	14.11	98	375789	22.92	ug/L	-0.01
Spiked Amount 25.000			Recovery =	91.68%		
53) 4-Bromofluorobenzene	17.75	95	134033	22.82	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.28%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.59	85	167673	18.98	ug/L	97
3) Chloromethane	4.89	50	253987	17.39	ug/L	99
4) Vinyl chloride	5.18	62	247018	18.99	ug/L	99
5) Bromomethane	5.77	94	122262	18.12	ug/L	99
6) Chloroethane	5.97	64	138341	20.06	ug/L	99
7) Trichlorofluoromethane	6.77	101	216048	23.89	ug/L	97
8) Acetone	6.92	43	30195	27.20	ug/L	94
9) Iodomethane	7.57	142	101387	24.25	ug/L	98
10) 1,1-Dichloroethene	7.51	96	118322	22.43	ug/L	100
11) Methylene chloride	7.70	84	123188	19.85	ug/L	97
12) Freon 113	7.77	101	121362	19.43	ug/L	100
13) Carbon disulfide	8.02	76	440334	23.46	ug/L	97
14) trans-1,2-Dichloroethene	8.59	96	118176	20.25	ug/L	100
15) MTBE	8.72	73	198052	19.86	ug/L	100
16) 1,1-Dichloroethane	8.91	63	262827	21.59	ug/L	100
17) Vinyl acetate	9.07	43	230925	24.42	ug/L	100
18) 2-Butanone (MEK)	9.46	72	6908	23.69	ug/L	57
19) cis-1,2-Dichloroethene	9.65	96	129340	21.40	ug/L	98
20) Bromochloromethane	9.86	128	45302	20.48	ug/L	97
21) Chloroform	9.92	83	214765	21.38	ug/L	99
22) 2,2-Dichloropropane	10.02	77	161850	19.87	ug/L	99
24) 1,2-Dichloroethane	10.77	62	124884	20.37	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	149265	20.69	ug/L	99
27) 1,1-Dichloropropene	11.14	75	176835	21.25	ug/L	99
28) Carbon tetrachloride	11.38	117	123392	21.48	ug/L	99
29) Benzene	11.43	78	441095	19.83	ug/L	98
30) Dibromomethane	12.16	93	56613	21.51	ug/L	99
31) 1,2-Dichloropropane	12.20	63	131730	21.20	ug/L	99
32) Trichloroethene	12.25	95	156001	28.04	ug/L	99
33) Bromodichloromethane	12.32	83	134719	20.63	ug/L	99
34) 2-Chlorovinylethylether	12.89	63	115	Below Cal #		55
35) cis-1,3-Dichloropropene	13.16	75	165392	20.86	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.29	43	75059	23.12	ug/L	100
37) trans-1,3-Dichloropropene	13.72	75	133331	21.79	ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	62511	21.25	ug/L	98
40) Toluene	14.21	92	253680	20.06	ug/L	99
42) 1,3-Dichloropropane	14.27	76	125269	20.65	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 (#) = qualifier out of range (m) = manual integration  
 03221109.D 031711.M Tue Mar 22 12:26:27 2011

164 of 285

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D Vial: 8  
 Acq On : 22 Mar 2011 10:34 am Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	48952	24.21	ug/L	# 91
44) Dibromochloromethane	14.64	129	79005	21.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	64283	21.11	ug/L	98
46) Tetrachloroethene	15.19	166	102000	21.22	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	83023	20.92	ug/L	97
48) Chlorobenzene	16.12	112	259623	20.61	ug/L	100
49) Ethylbenzene	16.37	91	489576	20.63	ug/L	99
50) m,p-Xylenes	16.63	106	169469	20.39	ug/L	100
51) Styrene	17.09	104	251259	19.93	ug/L	98
52) o-Xylene	17.19	106	164097	20.31	ug/L	97
55) Bromoform	16.81	173	41119	22.72	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.17	83	80806	22.08	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	17587	22.09	ug/L	98
58) Isopropylbenzene	17.69	105	443465	23.17	ug/L	99
59) Bromobenzene	18.04	156	97005	21.97	ug/L	100
60) n-Propylbenzene	18.30	91	600146	21.97	ug/L	99
61) 2-Chlorotoluene	18.44	91	331120	20.69	ug/L	100
62) 4-Chlorotoluene	18.54	91	347759	21.92	ug/L	100
63) 1,3,5-Trimethylbenzene	18.69	105	360308	21.79	ug/L	99
64) tert-Butylbenzene	19.08	119	302623	21.50	ug/L	98
65) 1,2,4-Trimethylbenzene	19.22	105	360516	21.69	ug/L	99
66) sec-Butylbenzene	19.37	105	512653	21.24	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	191411	21.28	ug/L	98
68) 1,4-Dichlorobenzene	19.56	146	197055	21.76	ug/L	100
69) p-Isopropyltoluene	19.60	119	408509	22.15	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	168894	21.58	ug/L	100
71) n-Butylbenzene	20.11	91	456627	22.24	ug/L	91
72) 1,2-Dibromo-3-chloropropan	20.58	157	10528	21.59	ug/L	100
73) 1,2,4-Trichlorobenzene	22.27	180	118528	23.45	ug/L	100
74) Naphthalene	22.61	128	152867	22.81	ug/L	98
75) Hexachlorobutadiene	22.67	225	74190	22.99	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	96540	23.43	ug/L	

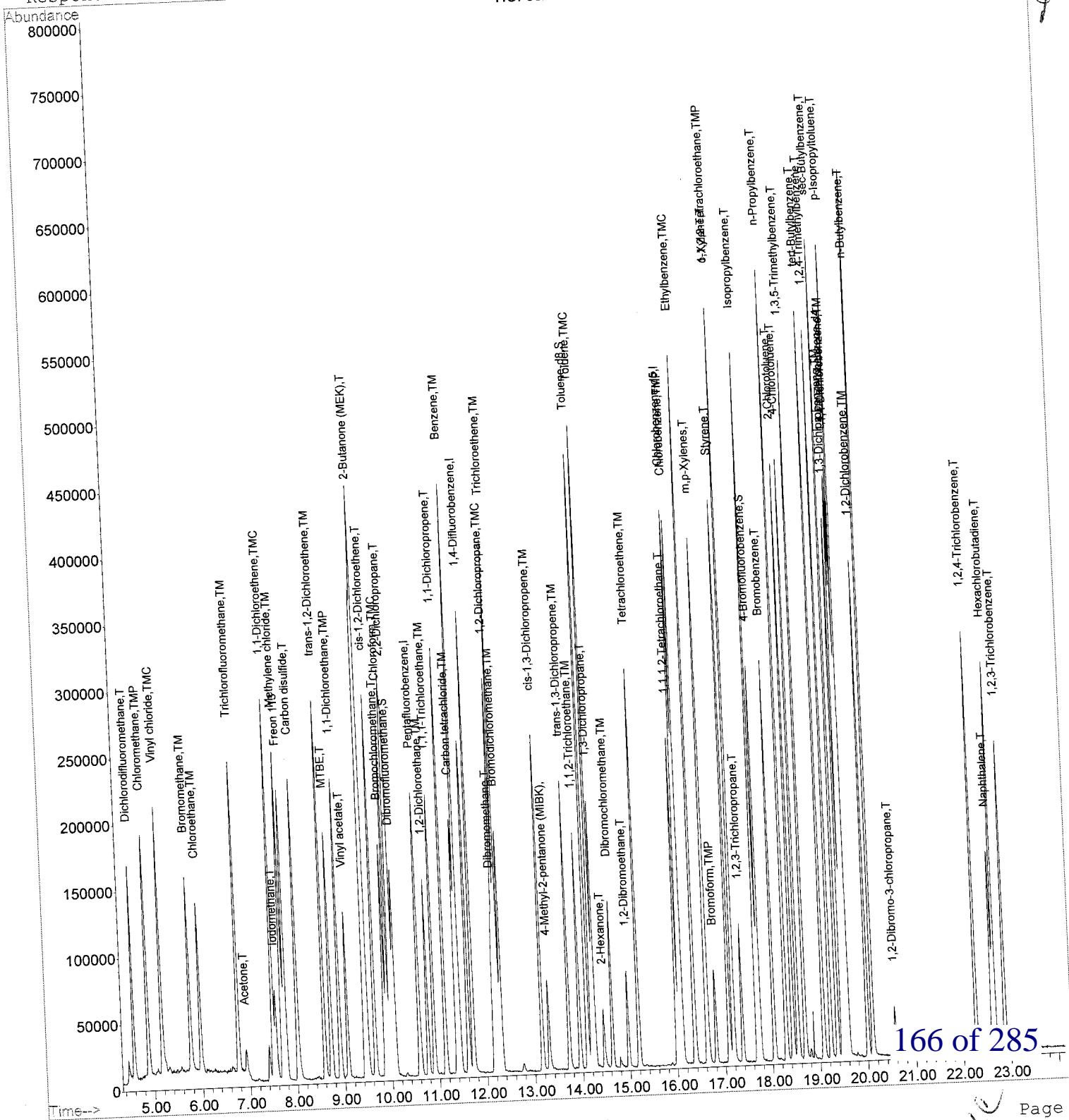
165 of 285  
V

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D      Vial: 8  
 Acq On : 22 Mar 2011 10:34 am      Operator: LC  
 Sample : -MS1      Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221109.D



166 of 285

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221110.D Vial: 9  
 Acq On : 22 Mar 2011 11:05 am Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : 100X ~~203/22/11~~ Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

*✓ 3/22/11*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	186713	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	327964	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	272122	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127198	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.08	113	108034	22.99	ug/L	0.00
Spiked Amount	25.000		Recovery	=	91.96%	
39) Toluene-d8	14.11	98	371265	22.45	ug/L	0.00
Spiked Amount	25.000		Recovery	=	89.80%	
53) 4-Bromofluorobenzene	17.74	95	137039	22.98	ug/L	0.00
Spiked Amount	25.000		Recovery	=	91.92%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	167290	18.97	ug/L	99
3) Chloromethane	4.89	50	264201	18.12	ug/L	98
4) Vinyl chloride	5.17	62	250008	19.25	ug/L	100
5) Bromomethane	5.77	94	123708	18.37	ug/L	99
6) Chloroethane	5.98	64	137202	19.93	ug/L	98
7) Trichlorofluoromethane	6.77	101	213241	23.62	ug/L	99
8) Acetone	6.93	43	28065	25.05	ug/L	99
9) Iodomethane	7.56	142	102145	24.47	ug/L	98
10) 1,1-Dichloroethene	7.51	96	117328	22.28	ug/L	99
11) Methylene chloride	7.70	84	124814	20.15	ug/L	98
12) Freon 113	7.77	101	119416	19.15	ug/L	98
13) Carbon disulfide	8.02	76	430910	23.00	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	118271	20.30	ug/L	96
15) MTBE	8.73	73	202171	20.30	ug/L	99
16) 1,1-Dichloroethane	8.92	63	263888	21.71	ug/L	99
17) Vinyl acetate	9.08	43	227435	24.09	ug/L	99
18) 2-Butanone (MEK)	9.47	72	6724	23.12	ug/L	61
19) cis-1,2-Dichloroethene	9.65	96	127577	21.14	ug/L	99
20) Bromochloromethane	9.86	128	46053	20.86	ug/L	96
21) Chloroform	9.92	83	214343	21.37	ug/L	99
22) 2,2-Dichloropropane	10.02	77	158836	19.53	ug/L	97
24) 1,2-Dichloroethane	10.77	62	124391	20.32	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	147262	20.45	ug/L	99
27) 1,1-Dichloropropene	11.14	75	172867	20.59	ug/L	99
28) Carbon tetrachloride	11.38	117	121871	21.03	ug/L	99
29) Benzene	11.43	78	446742	19.90	ug/L	99
30) Dibromomethane	12.16	93	56853	21.41	ug/L	98
31) 1,2-Dichloropropane	12.20	63	130272	20.78	ug/L	99
32) Trichloroethene	12.26	95	158066	28.16	ug/L	99
33) Bromodichloromethane	12.32	83	137066	20.80	ug/L	99
34) 2-Chlorovinylethylether	13.15	63	758	Below Cal	#	55
35) cis-1,3-Dichloropropene	13.16	75	164550	20.57	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	75063	22.91	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	134829	21.84	ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	63229	21.31	ug/L	98
40) Toluene	14.20	92	256827	20.13	ug/L	99
42) 1,3-Dichloropropane	14.26	76	130073	21.12	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03221110.D 031711.M Tue Mar 22 12:26:51 2011

*167 of 285*

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221110.D Vial: 9  
 Acq On : 22 Mar 2011 11:05 am Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : ~~100%~~ ~~03/22/11~~ Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	51449	25.06	ug/L	# 89
44) Dibromochloromethane	14.64	129	80270	21.68	ug/L	99
45) 1,2-Dibromoethane	14.97	107	67888	21.96	ug/L	100
46) Tetrachloroethene	15.19	166	103042	21.11	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	82512	20.47	ug/L	98
48) Chlorobenzene	16.11	112	261280	20.43	ug/L	99
49) Ethylbenzene	16.37	91	493565	20.48	ug/L	100
50) m,p-Xylenes	16.64	106	172841	20.48	ug/L	99
51) Styrene	17.09	104	252548	19.73	ug/L	98
52) o-Xylene	17.19	106	162978	19.87	ug/L	100
55) Bromoform	16.81	173	41208	22.37	ug/L	94
56) 1,1,2,2-Tetrachloroethane	17.18	83	83750	22.49	ug/L	100
57) 1,2,3-Trichloropropane	17.37	110	18202	22.46	ug/L	95
58) Isopropylbenzene	17.69	105	449720	23.09	ug/L	99
59) Bromobenzene	18.04	156	98766	21.98	ug/L	99
60) n-Propylbenzene	18.29	91	608804	21.90	ug/L	100
61) 2-Chlorotoluene	18.44	91	336063	20.63	ug/L	99
62) 4-Chlorotoluene	18.55	91	349191	21.62	ug/L	100
63) 1,3,5-Trimethylbenzene	18.69	105	356745	21.20	ug/L	99
64) tert-Butylbenzene	19.08	119	301682	21.05	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	364419	21.54	ug/L	98
66) sec-Butylbenzene	19.37	105	518392	21.11	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	191590	20.92	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	195033	21.16	ug/L	99
69) p-Isopropyltoluene	19.60	119	409279	21.80	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	170099	21.36	ug/L	99
71) n-Butylbenzene	20.11	91	458492	21.94	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	11352	22.87	ug/L	91
73) 1,2,4-Trichlorobenzene	22.28	180	124334	24.17	ug/L	99
74) Naphthalene	22.62	128	166957	24.48	ug/L	100
75) Hexachlorobutadiene	22.67	225	71863	21.88	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100478	23.96	ug/L	98

168 of 285

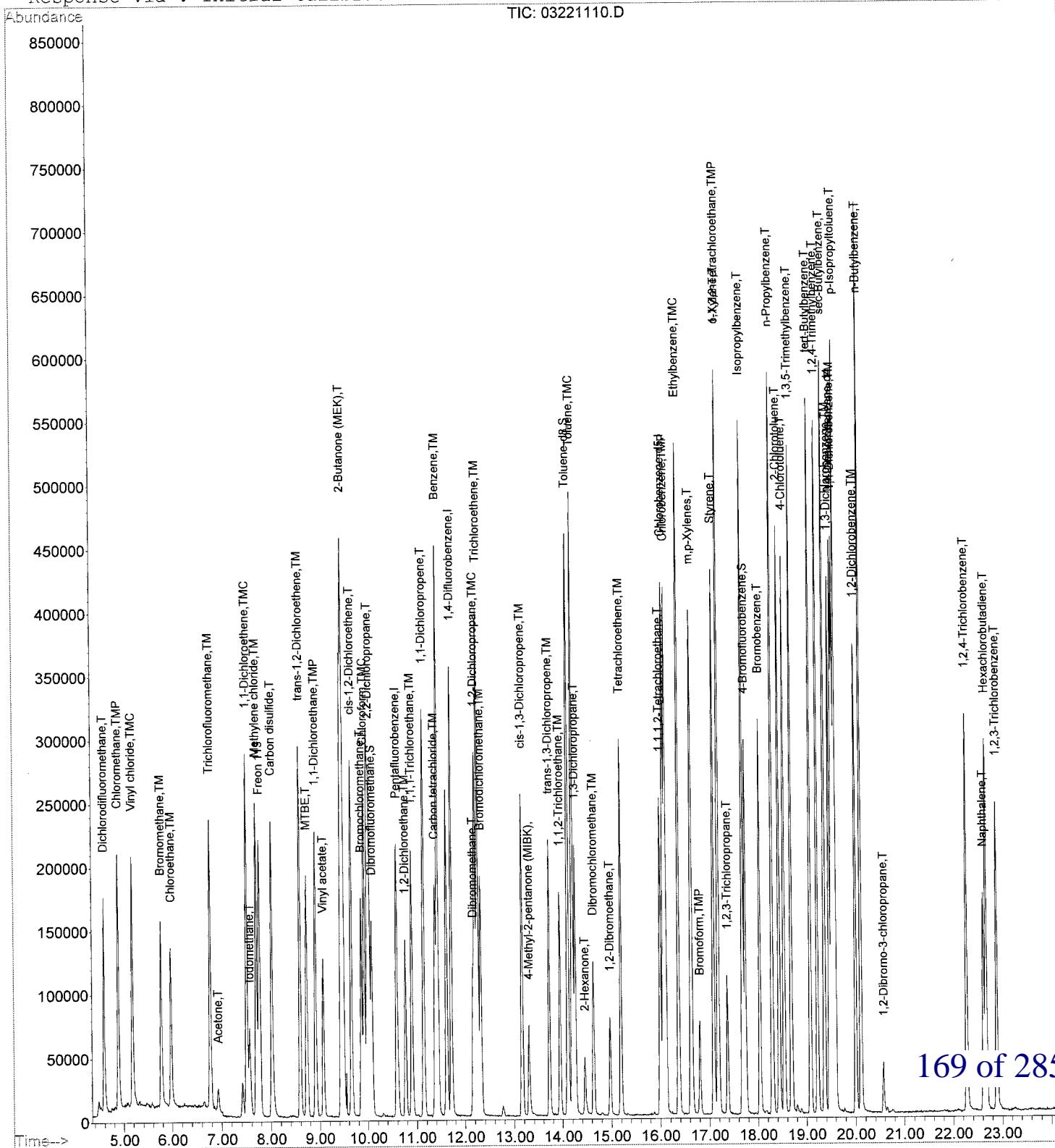
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221110.D Vial: 9  
 Acq On : 22 Mar 2011 11:05 am Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : 100X Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



169 of 285

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221118.D Vial: 3  
 Acq On : 22 Mar 2011 3:12 pm Operator: LC  
 Sample : PUC1004-01 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 15:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	179922	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	319214	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	263015	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	117511	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	107289	23.70	ug/L	0.00
Spiked Amount 25.000			Recovery =	94.80%		
39) Toluene-d8	14.11	98	359859	22.35	ug/L	0.00
Spiked Amount 25.000			Recovery =	89.40%		
53) 4-Bromofluorobenzene	17.75	95	125075	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.80%		
<b>Target Compounds</b>						
5) Bromomethane	5.76	94	215	0.29	ug/L	#LP/WT 3
8) Acetone	6.93	43	2114	Below Cal	#	68
10) 1,1-Dichloroethene	7.51	96	15628	3.08	ug/L	90
11) Methylene chloride	7.71	84	2963	0.50	ug/L	LP/WT 92
13) Carbon disulfide	8.01	76	2288	0.13	ug/L	100
15) MTBE	8.74	73	20632	2.15	ug/L	97
16) 1,1-Dichloroethane	8.92	63	21009	1.79	ug/L	98
17) Vinyl acetate	9.08	43	1612	0.18	ug/L	#LP/WT 83
19) cis-1,2-Dichloroethene	9.66	96	13446	2.31	ug/L	93
21) Chloroform	9.93	83	6671	0.69	ug/L	99
32) Trichloroethene	12.26	95	42876	7.85	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.33	43	729	0.23	ug/L	#LP/WT 50
38) 1,1,2-Trichloroethane	14.11	83	277	0.10	ug/L	# 1
46) Tetrachloroethene	15.20	166	2325	0.49	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.19	83	393	0.11	ug/L	# 57
74) Naphthalene	22.64	128	1242	0.20	ug/L	100

3/17/11  
3/23/11  
170 of 285

V

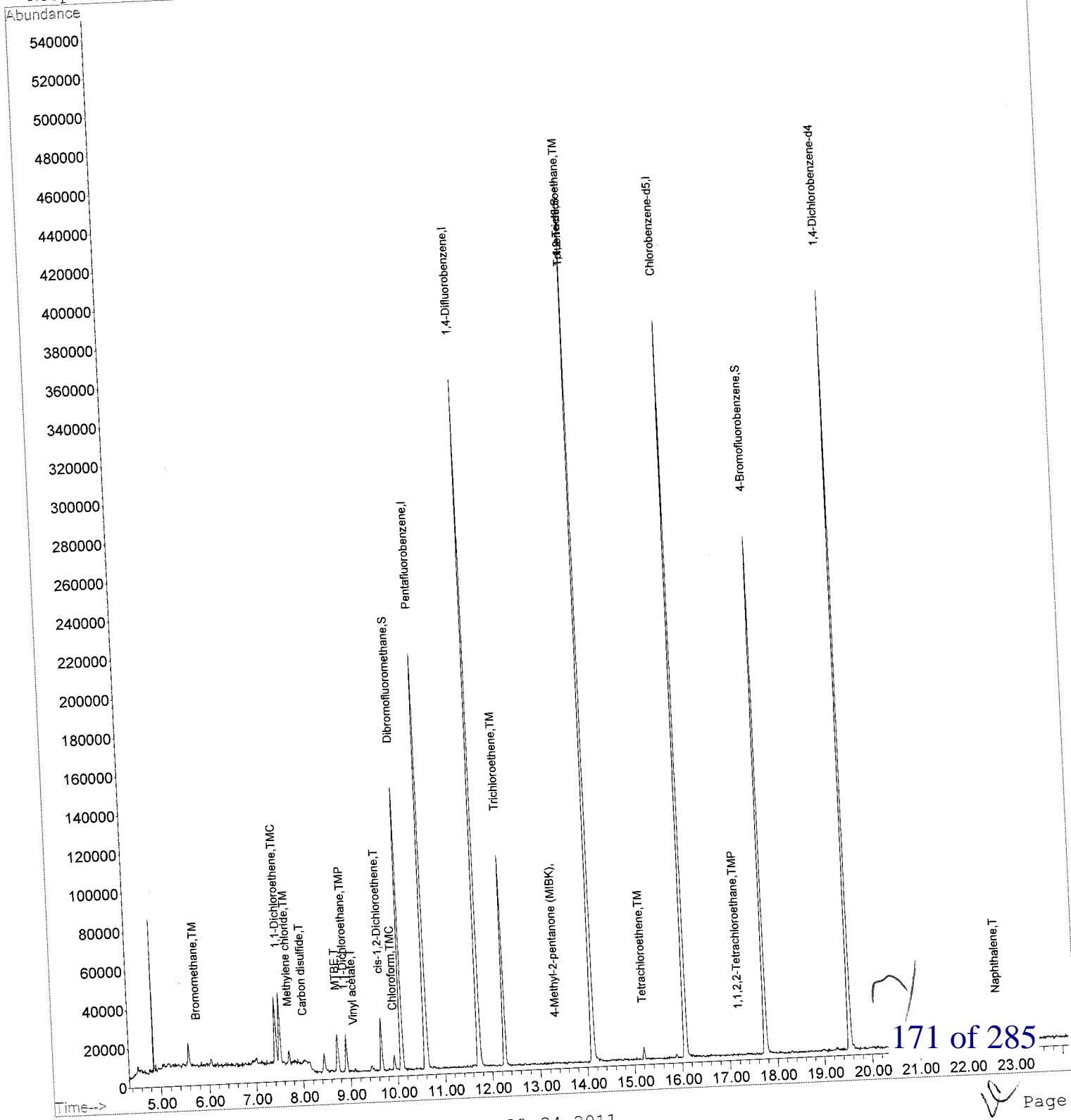
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221118.D      Vial: 3  
 Acq On : 22 Mar 2011 3:12 pm      Operator: LC  
 Sample : PUC1004-01      Inst : GCMS7  
 Misc :      Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 15:38 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 22 15:38 2011

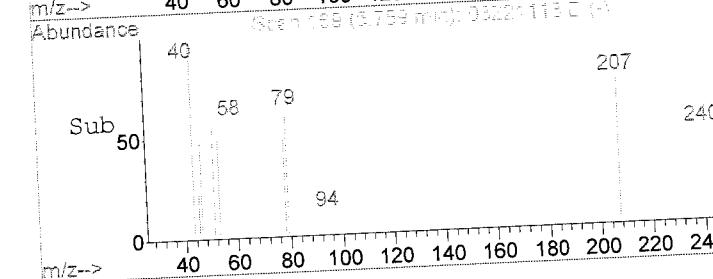
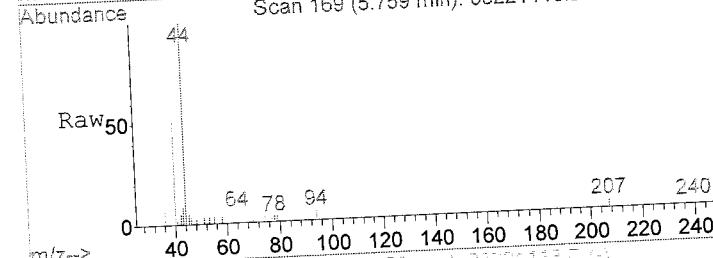
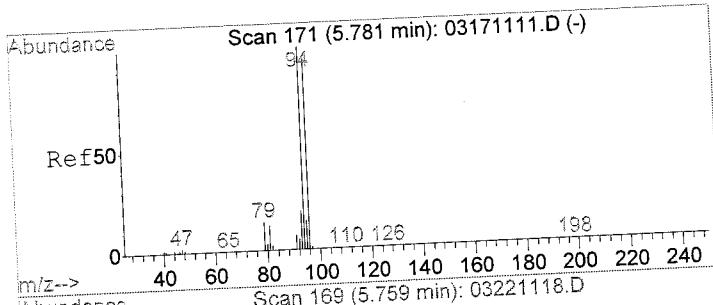
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221118.D

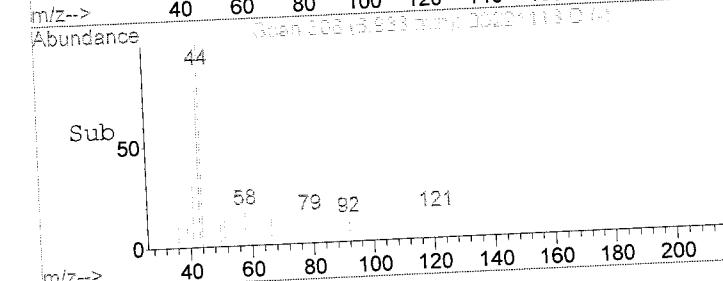
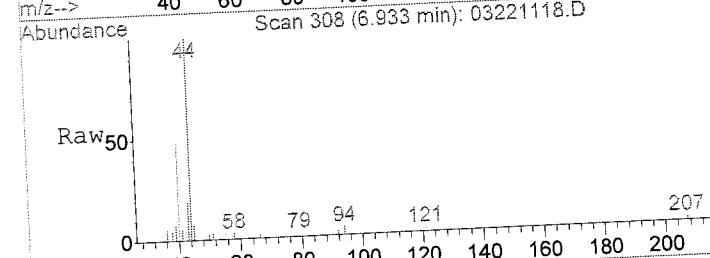
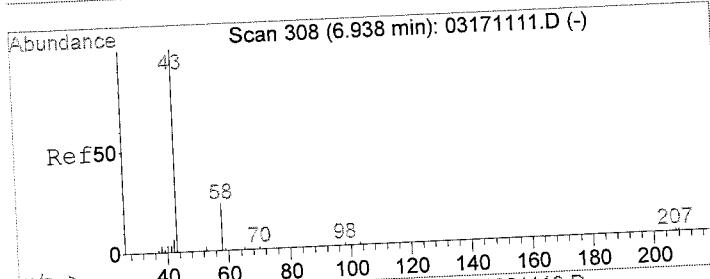
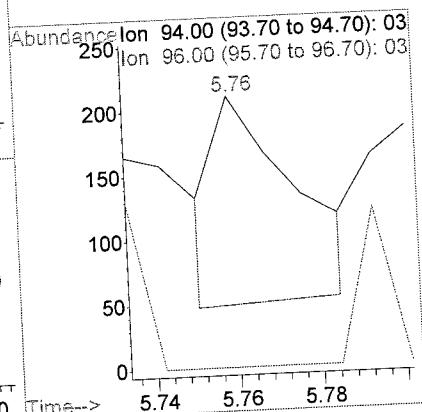


171 of 285



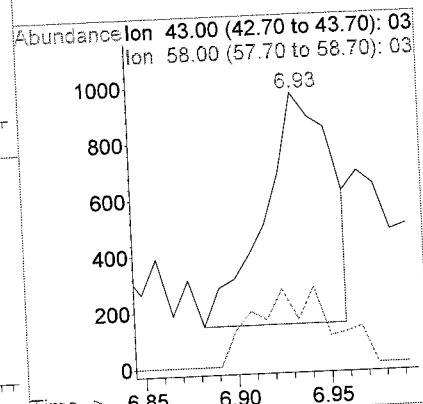
#5  
Bromomethane  
Concen: 0.29 ug/L  
RT: 5.76 min Scan# 169  
Delta R.T. -0.02 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

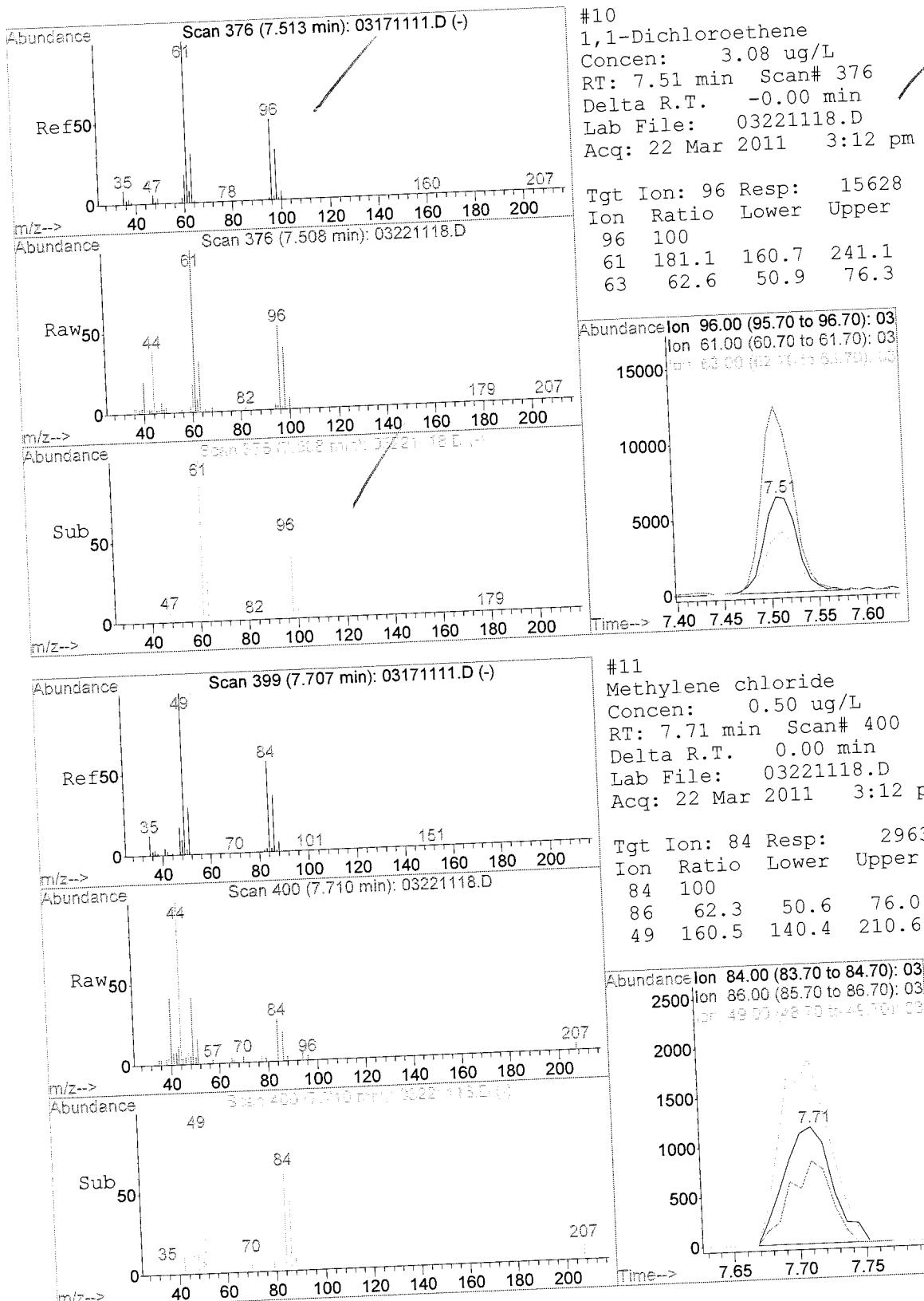
Tgt Ion: 94 Resp: 215  
Ion Ratio Lower Upper  
94 100  
96 0.0 74.0 111.0#



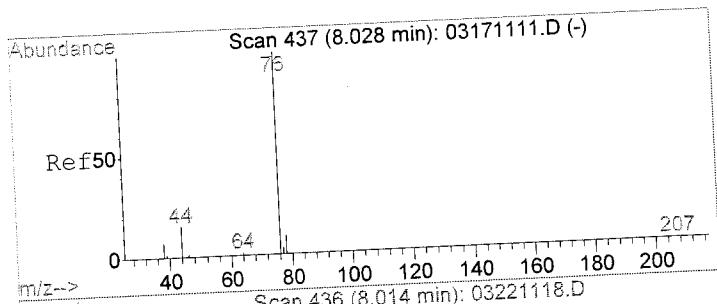
#8  
Acetone  
Concen: Below Cal  
RT: 6.93 min Scan# 308  
Delta R.T. -0.00 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

Tgt Ion: 43 Resp: 2114  
Ion Ratio Lower Upper  
43 100  
58 10.3 21.2 31.8#



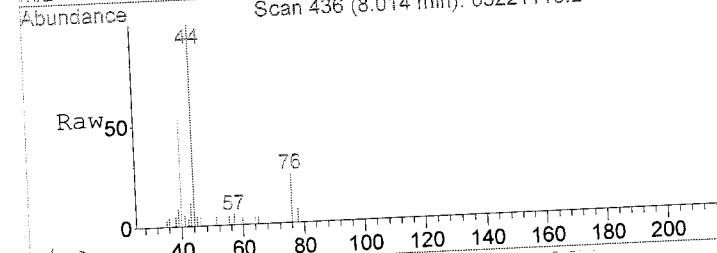


173 of 285

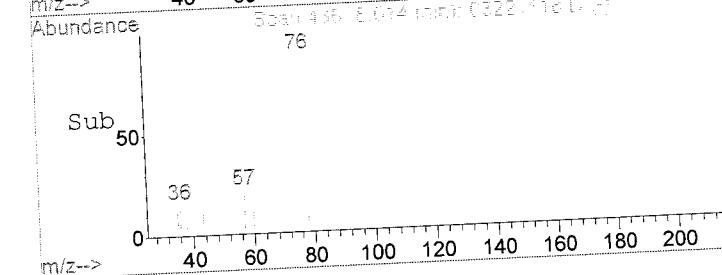
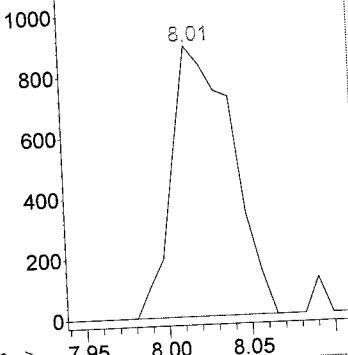


#13  
Carbon disulfide  
Concen: 0.13 ug/L  
RT: 8.01 min Scan# 436  
Delta R.T. -0.01 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

Tgt Ion: 76 Resp: 2288

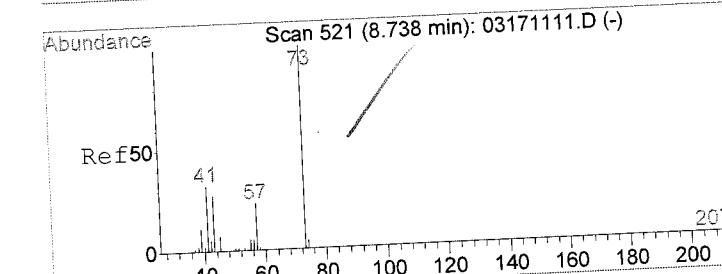


Abundance Ion 76.00 (75.70 to 76.70): 03

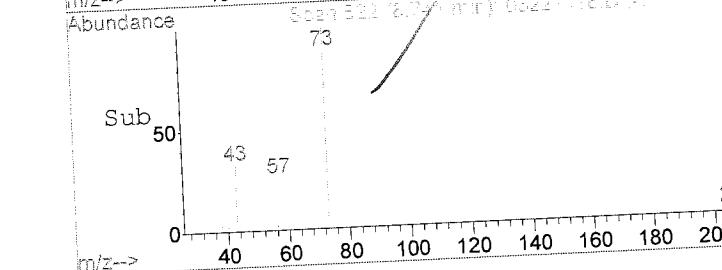
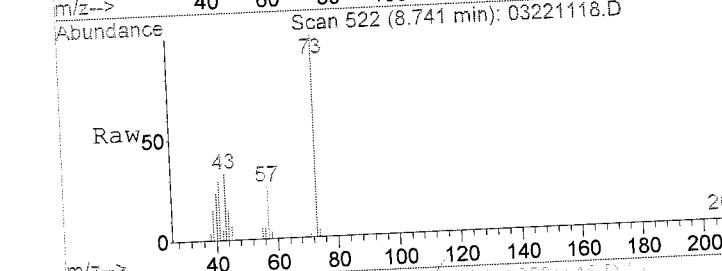
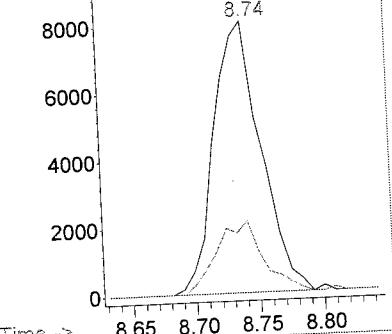


#15  
MTBE  
Concen: 2.15 ug/L  
RT: 8.74 min Scan# 522  
Delta R.T. 0.00 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

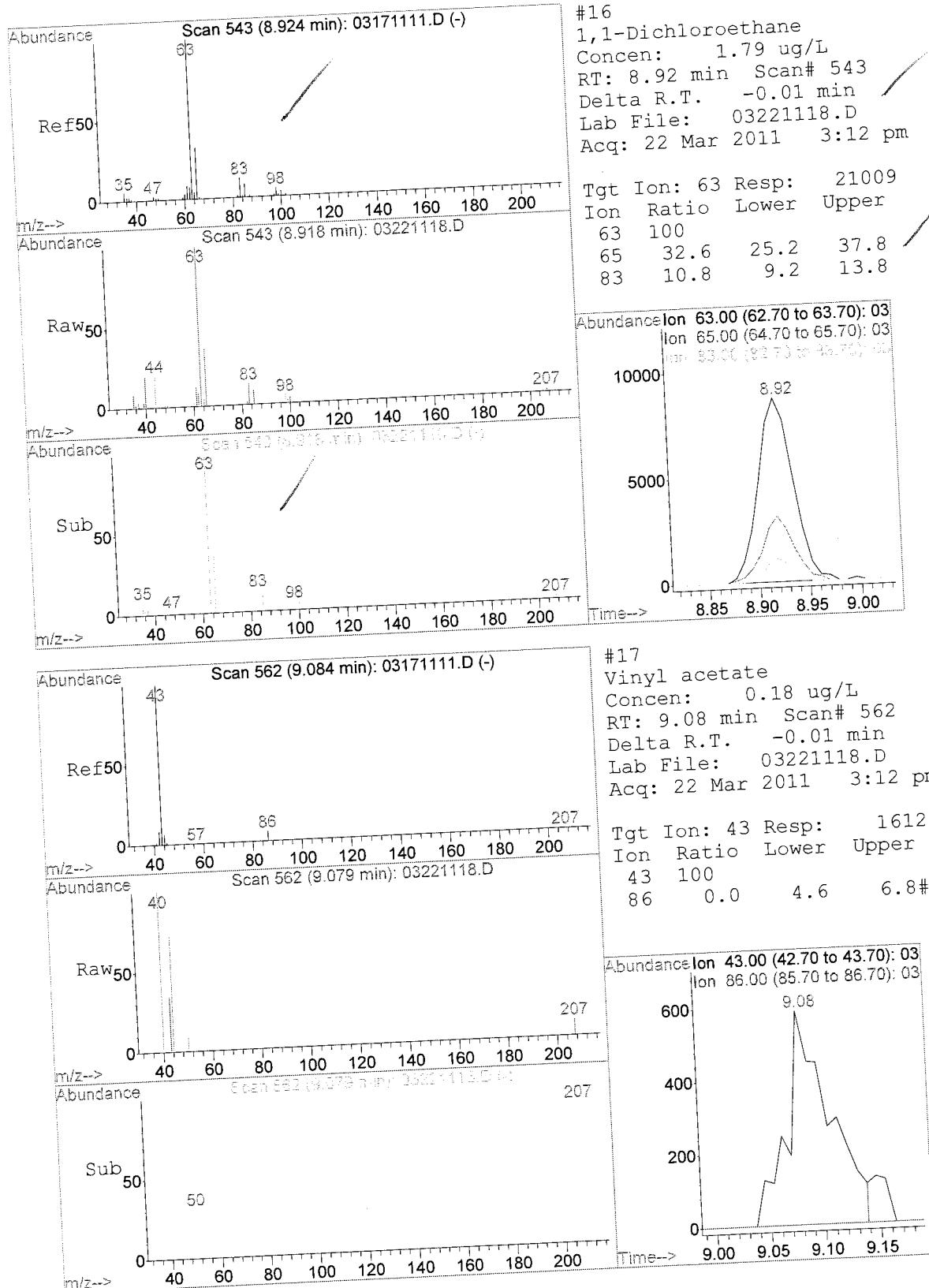
Tgt Ion: 73 Resp: 20632  
Ion Ratio Lower Upper  
73 100  
57 26.3 20.0 30.0



Abundance Ion 73.10 (72.80 to 73.80): 03  
Ion 57.05 (56.75 to 57.75): 03

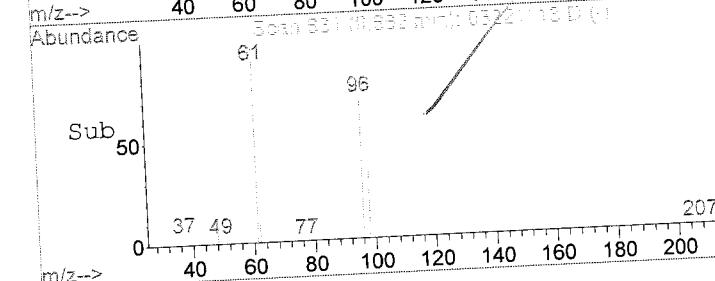
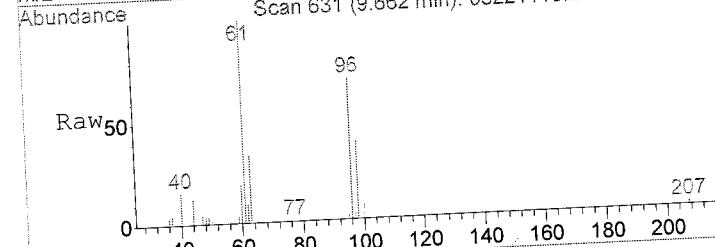
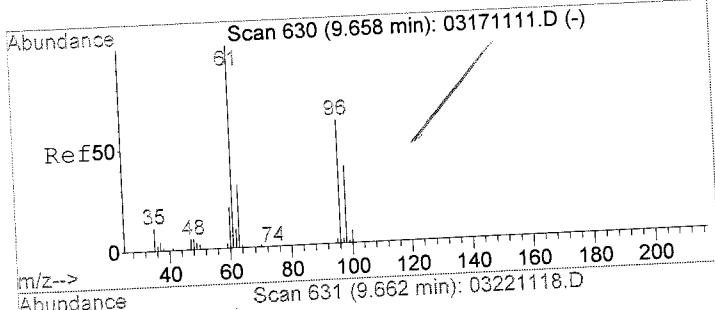


174 of 285  
V



175 of 285

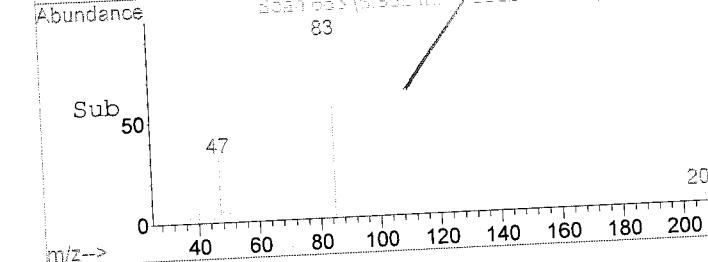
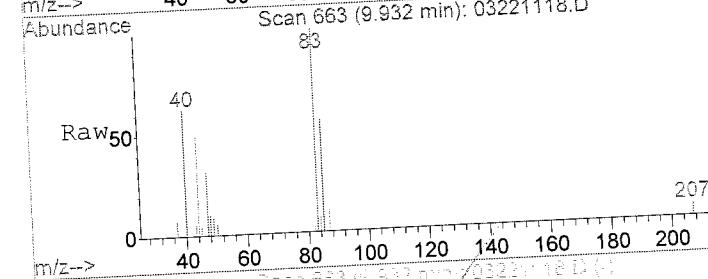
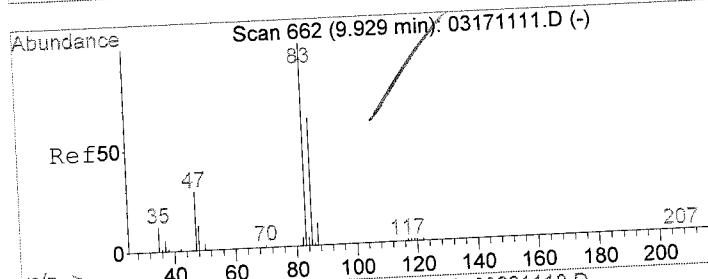
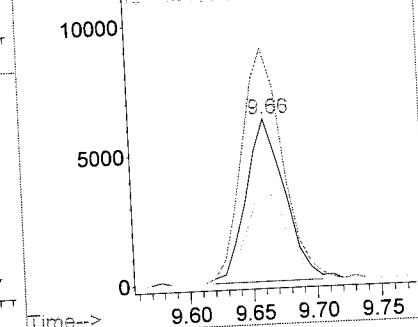
V



#19  
cis-1,2-Dichloroethene  
Concen: 2.31 ug/L  
RT: 9.66 min Scan# 631  
Delta R.T. 0.00 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

Tgt Ion: 96 Resp: 13446  
Ion Ratio Lower Upper  
96 100  
61 150.4 128.5 192.7  
98 59.7 49.9 74.9

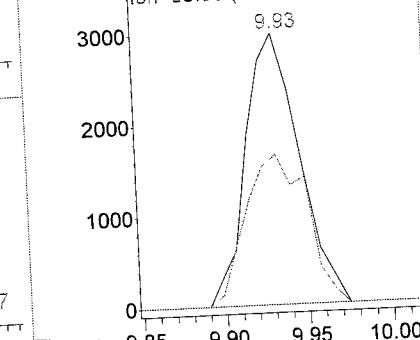
Abundance Ion 96.00 (95.70 to 96.70): 03  
Ion 61.00 (60.70 to 61.70): 03  
Ion 207.00 (206.70 to 207.70): 03



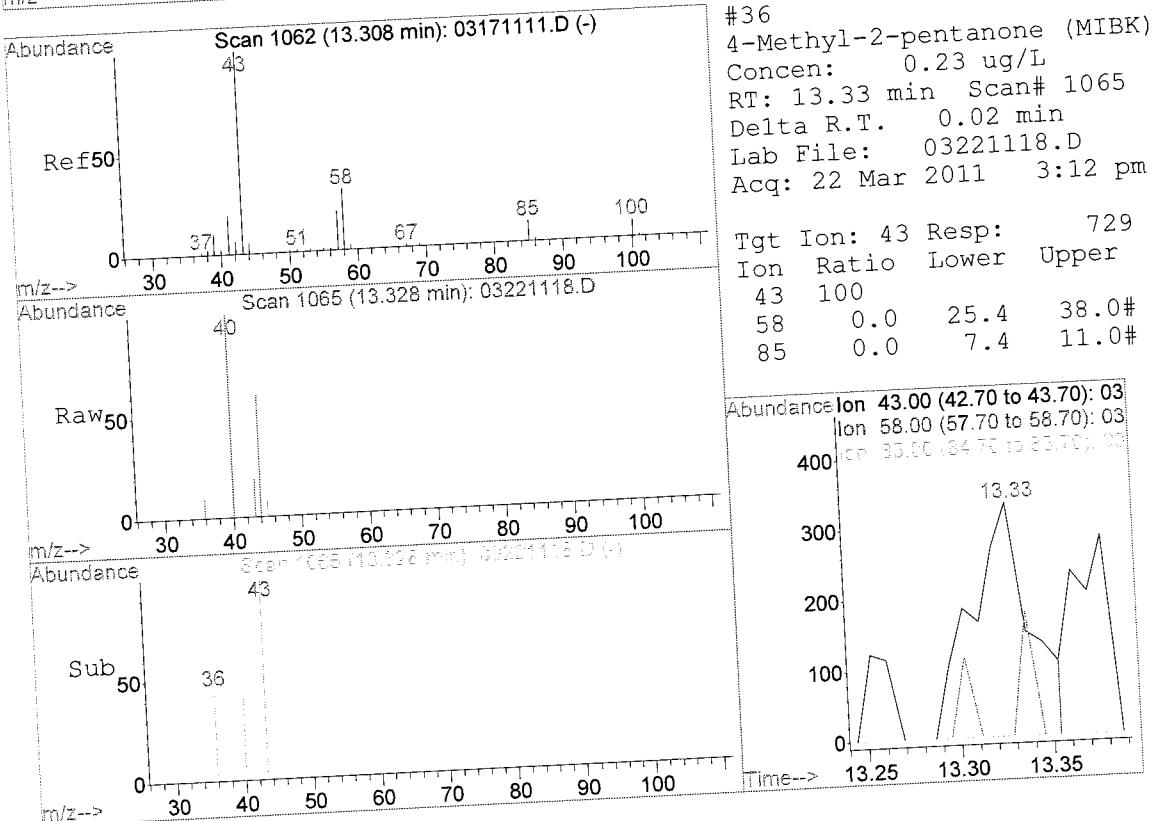
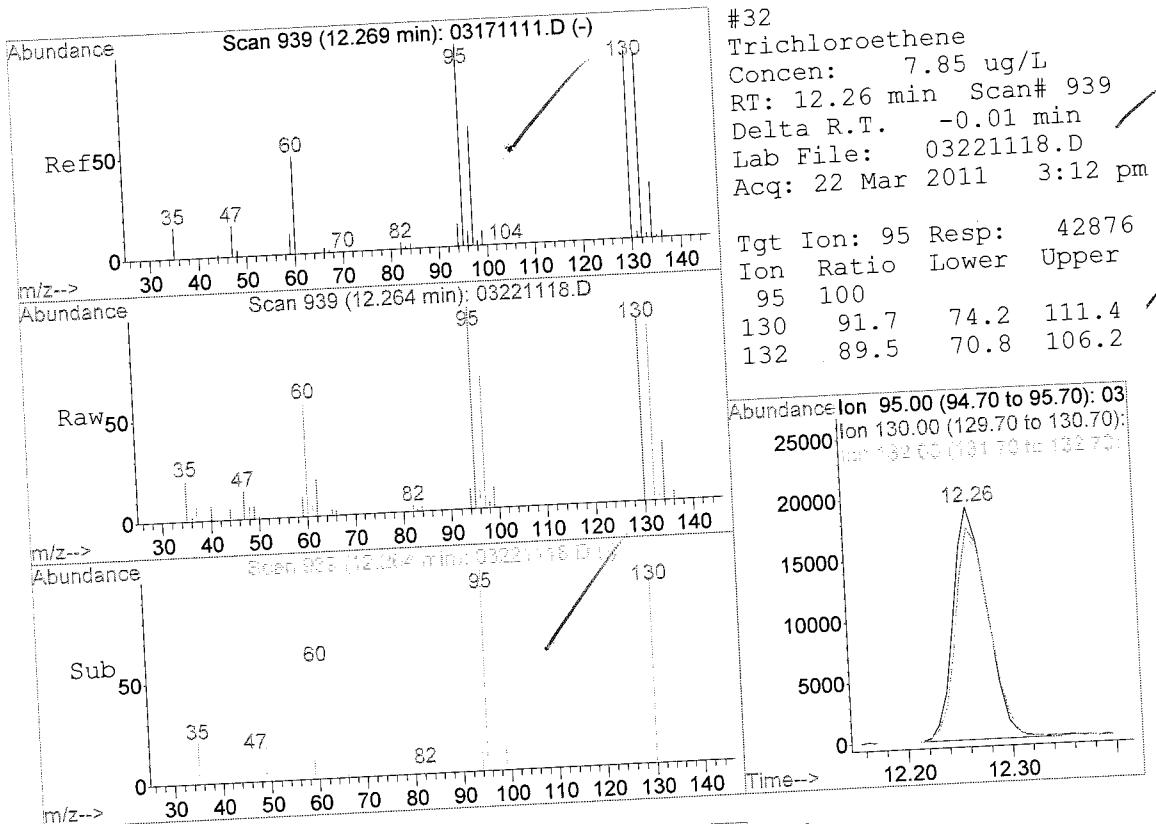
#21  
Chloroform  
Concen: 0.69 ug/L  
RT: 9.93 min Scan# 663  
Delta R.T. 0.00 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm

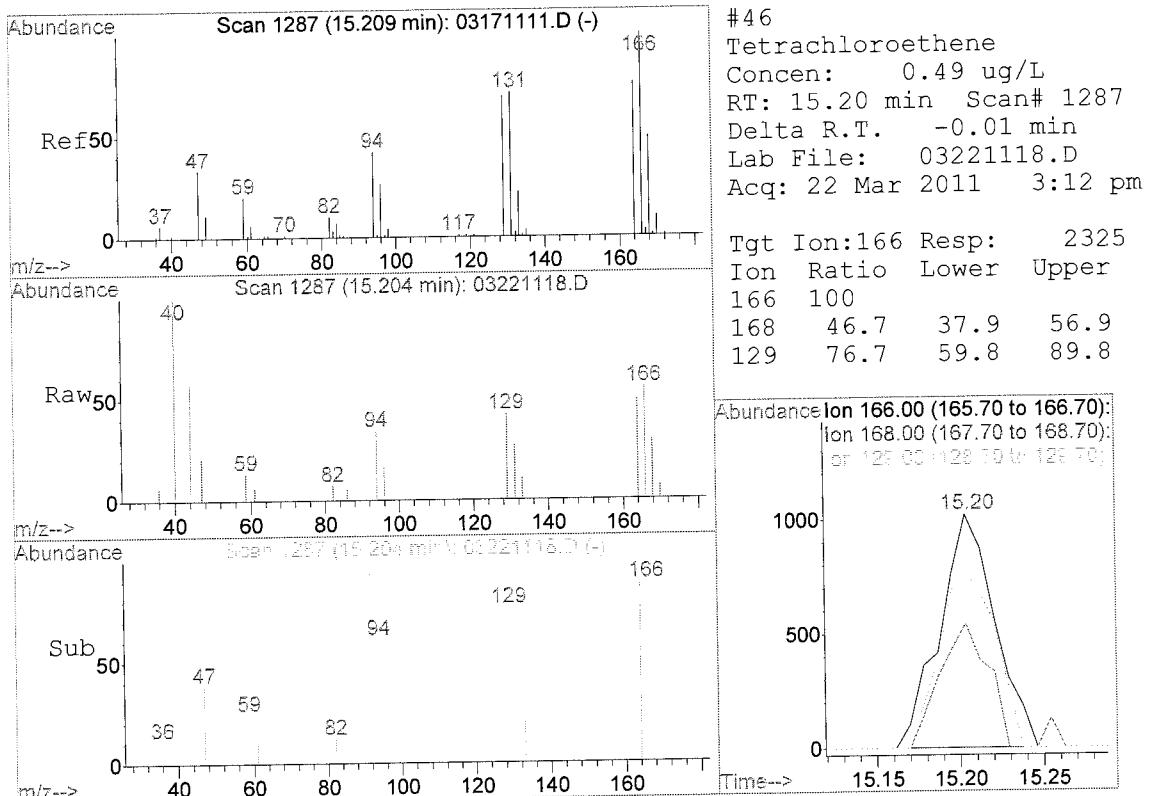
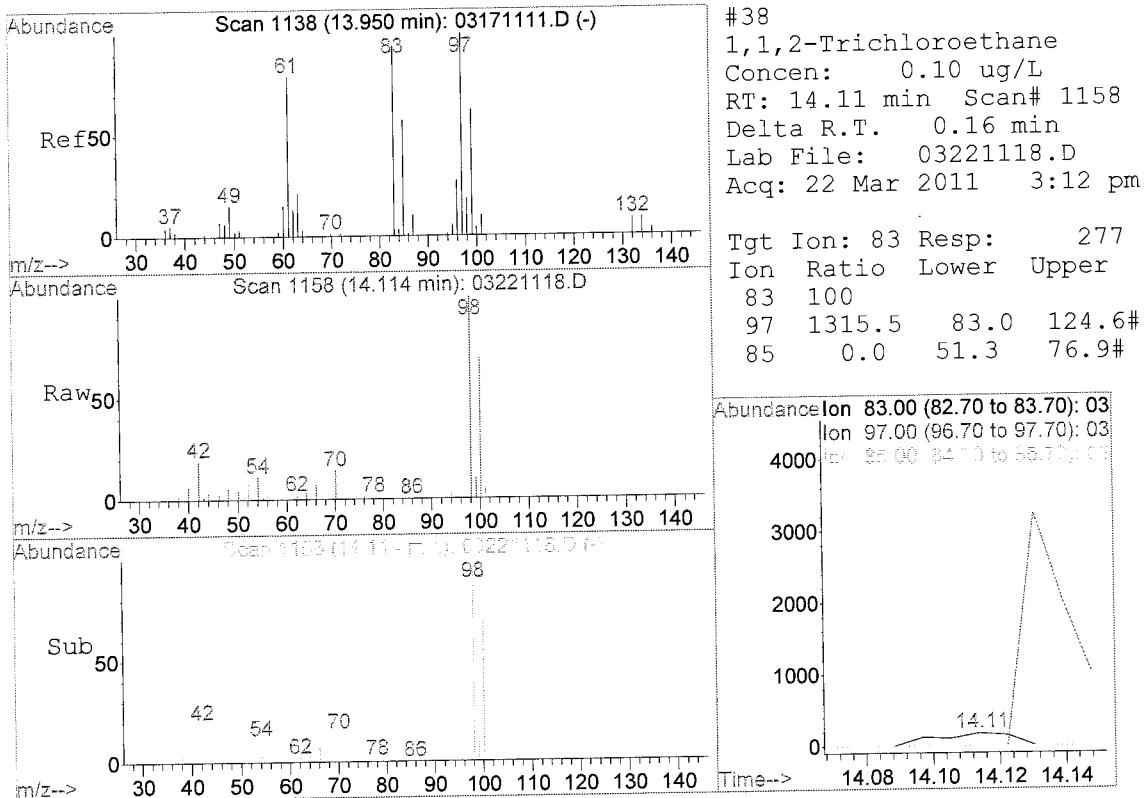
Tgt Ion: 83 Resp: 6671  
Ion Ratio Lower Upper  
83 100  
85 63.5 51.6 77.4

Abundance Ion 83.00 (82.70 to 83.70): 03  
Ion 85.00 (84.70 to 85.70): 03



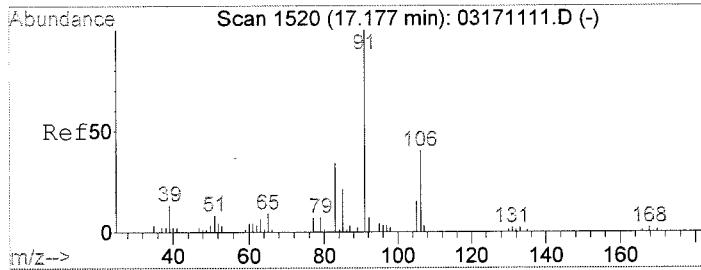
176 of 285  
V



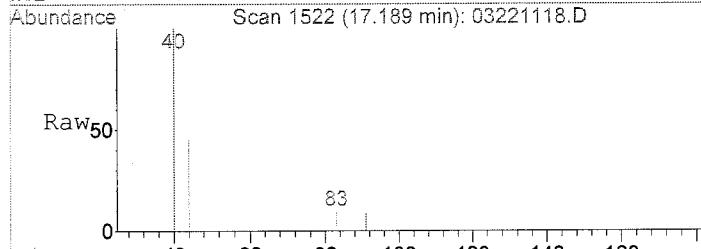


178 of 285

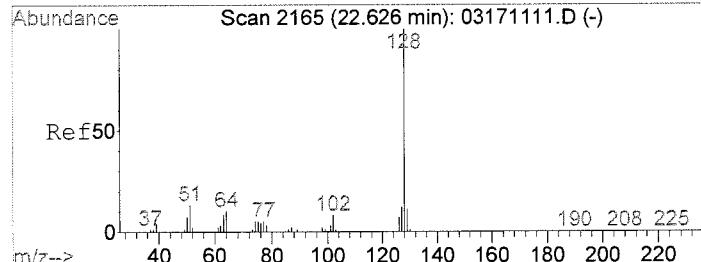
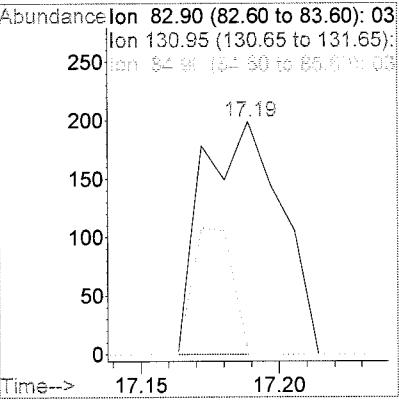
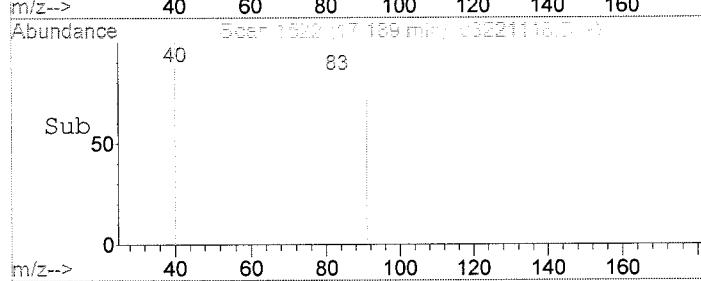




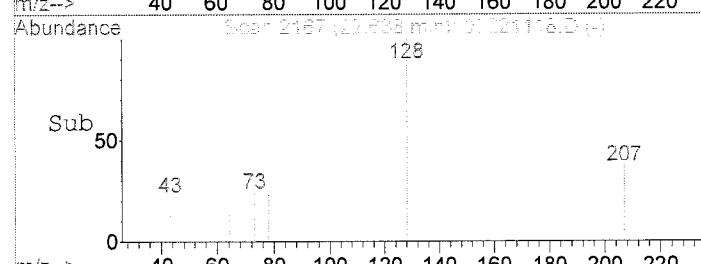
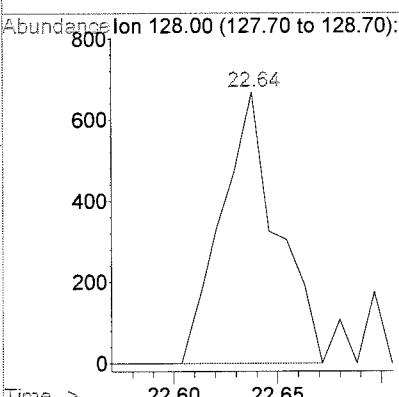
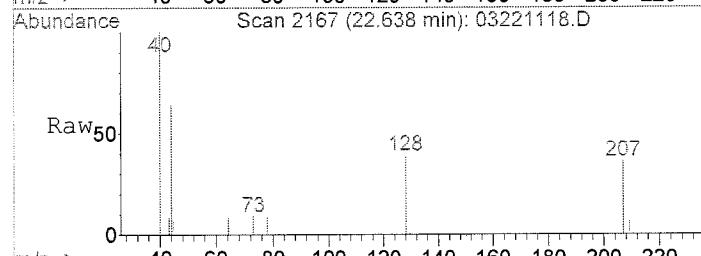
#56  
1,1,2,2-Tetrachloroethane  
Concen: 0.11 ug/L  
RT: 17.19 min Scan# 1522  
Delta R.T. 0.01 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm



Tgt Ion: 83 Resp: 393  
Ion Ratio Lower Upper  
83 100  
131 0.0 5.9 8.9#  
85 27.5 50.6 76.0#



#74  
Naphthalene  
Concen: 0.20 ug/L  
RT: 22.64 min Scan# 2167  
Delta R.T. 0.01 min  
Lab File: 03221118.D  
Acq: 22 Mar 2011 3:12 pm



179 of 285





THE LEADER IN ENVIRONMENTAL TESTING

DIGESTION and/or EXTRACTION

METHOD: EPA 3520C

Work Order:

PUC1004-01

## PREPARATION BENCH SHEET

11C0614

Printed: 3/18/2011 12:31 PM

TestAmerica Phoenix

Surrogate used: 181 532

Initials \_\_\_\_\_

Extraction Comments \_\_\_\_\_

Matrix: Water

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Prepared using: N GCMS Semivolatiles - EPA 3520C		Surrogate used: 181 532	Initials _____	Extraction Comments _____
11C0614-BLK1	QC			03/16/11 16:35	1000	1								100			
11C0614-BS1	QC			03/16/11 16:35	1000	1				PT05700	200			100			
11C0614-BSD1	QC			03/16/11 16:35	1000	1				PT05700	200			100			
11C0614-MS1	QC			03/16/11 16:35	1000	1	PUC0982-02			PT05700	200			100			
11C0614-MS2	QC			03/16/11 16:35	1000	1	PUC0911-02			PT05700	200			100			
11C0614-MSD1	QC			03/16/11 16:35	1000	1	PUC0982-02			PT05700	200			100			
11C0614-MSD2	QC			03/16/11 16:35	1000	1	PUC0911-02			PT05700	200			100			
PUC0911-01	D	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1	PUC0911-02			PT05700	200			100			
PUC0911-02	I	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1	PUC0911-02			PT05700	200			100			
PUC0911-03	E	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			MS/MSD
PUC0911-04	E	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC0911-05	D	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC0982-01	D	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC0982-02	R	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			MS/MSD
PUC0982-03	E	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC0982-04	D	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC1002-01	D	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			
PUC1004-01	E	N_1,4-Dioxane (SW82)		03/16/11 16:35	1000	1								100			Level 3

Reagents used in Batch

Reagent Description Solvent

Spiking Witnessed By

Date

Preparation Reviewed By

Date

Extracts Received By

Date

TestAmerica  
Phoenix

Check box if the back of the previous page is used for additional noted, comments, or calculations. The use of other scratch paper is strictly prohibited.

Extraction Date: 03-16-11

Liquid/Liquid Extraction Record

Test Code: 1,4 Dioxane

LIMS Batch No: BNA031611A

Element No.: 1C0614

Analytical Method: 3520 LL

Solvent/Lot No.1. DCM/J45501 2. Final Sol.: DCM/J45501 Na<sub>2</sub>SO<sub>4</sub> Lot #: \_\_\_\_\_

Acid/Base/Lot No.1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

Surrogate: Mod8210 Conc. 200 ppm Volume: 100uL Std. ID#: P00153Z Exp Date 9/14/11 KP

Spike #1: 1,4 Dioxane Conc. 100 ppm Volume: 200uL Std. ID#: P105700 Exp Date 10/31/13 KP

Spike #2: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Spike #3: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Spike #4: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Start Time: 1635 End Time: 1830 3-17-11 Spiked By: KA Spike Witness: KP

K-D'd by: DM E-vap'd by: DM Solvent Ex'd by: NA Brought to V<sub>f</sub> & Vialled by: DM

	Sample #	RE	Sample Frac.	pH <sup>1</sup>	Initial Vol/Wt (mLs/g)	Final Vol. (mLs)	K-D'd (V)	Evp'd (V)	Clean Up <sup>2</sup>	Color	Sample linked at:
1	MB	NA	NA	5 NA	1L	1mL	✓	✓	NA	Clear	NA
2	LCS	I	I	5	1L	1mL	✓	✓		Clear	
3	LCSD	↓	↓	5	1L	1mL	✓	✓		Clear	
4	MS PUC0982-02	G	7	1L	1mL	✓	✓			Clear	
5	MSD PUC0982-02	J	7	1L	1mL	✓	✓			Clear	
6	REV MS PUC0911-02	J	7	1L	1mL	✓	✓			Clear	
7	MSD PUC0911-02	G	7	1L	1mL	✓	✓			Clear	
8	PUC0911-01	D	7	1L	1mL	✓	✓			Clear	
9	PUC0911-02	I	7	1L	1mL	✓	✓			Clear	
10	PUC0911-03	E	7	1L	1mL	✓	✓			Clear	
11	PUC0911-04	E	7	1L	1mL	✓	✓			Clear	
12	PUC0911-05	D	7	1L	1mL	✓	✓			Clear	
13	PUC0982-01	D	7	1L	1mL	✓	✓			Clear	
14	PUC0982-02	H	7	1L	1mL	✓	✓			Clear	
15	PUC0982-03	E	7	1L	1mL	✓	✓			Yellow	
16	PUC0982-04	D	7	1L	1mL	✓	✓			Clear	
17	PUC1002-01	D	7	1L	1mL	✓	✓			Clear	
18	PUC1004-01	V	E	7 ↓	1L	1mL	✓	✓	↓	Clear	↓
19											
20											
21											
22											
23											
24											
25											

<sup>1</sup>Sample pH / Adjusted pH;

<sup>2</sup>AW is Acid Wash, DW is DCM wash.

a = Acid Fraction, b = base/neutral fraction

Insufficient Sample for MS/MSD     MS/MSD Designated     MS/MSD Chosen     Sample Container(s) Shaken & Rinsed with Solvent

Sample Extracts located in: Box# \_\_\_\_\_ Row(s) & Numbers \_\_\_\_\_ BNA Freezer  SVOA's Fridge \_\_\_\_\_

Comments: \_\_\_\_\_

182 of 285

Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

### METHOD

MODIFIED EPA 8270C

DATE: 01/05/11

Work Order: PUC1004-01

Attachment 1

INITIAL CALIBRATION CURVE CHECKLIST

Department: Semivola	Method: Mod. 8270 C	Instrument #: Cpus14
Analyst: C-Laurie	Analysis Date: 01-05-11	
Method name saved in the file: D:\WPANE\010511.M		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, <input checked="" type="checkbox"/> 9, <input type="checkbox"/> 10, 11, 12		
2. Did the calibration curve pass the method criteria? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
3. Were any points of the curve removed or replaced? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
If yes, what points were removed or replaced: lowest middle highest		
List of the analytes:		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input checked="" type="checkbox"/> Average Response Factor		
<input type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		

Review Signatures:	Analyst: <i>C-Laurie</i>	Date: <i>1-05-11</i>
	Reviewer: <i>Josephine</i>	Date: <i>01/05/11</i>

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: <u>Sewage</u>	Method: <u>MW 8270C</u>	Instrument #: <u>GCMS14</u>
Analyst: <u>C-Laurie</u>	Analysis Date: <u>2/25/11 - 01/05/11</u>	
Method name saved in the file: <u>D:\Input\10511.D.M</u>		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12      Y      N		
2. Did the calibration curve pass the method criteria?      Y      N		
3. Were any points of the curve removed or replaced?      Y      N		
If yes, what points were removed or replaced:      lowest      middle      highest		
Why?		
4. Were any individual analyte points removed?      Y      N		
If yes, what points were removed or replaced:      lowest      middle      highest		
List of the analytes: <del>update due to RT shift</del>		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input type="checkbox"/> Average Response Factor		
<input type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements:      Y      N		

Review Signatures:	Analyst:	Date:
	<u>C fair</u>	<u>3/01/2011</u>
Reviewer:		Date:
	<u>Joseph Bluhm</u>	<u>03/01/11</u>



Department: Semi-Volatiles

Page 21 of 23

SOP

Number/Revision

05-020.03

Date Issued:

March 2007

Expiration Date:

March 2009

EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS Analysis

NOT TO BE PHOTOCOPIED

EPA 8270C Modified 1,4-Dioxane by Isotope Dilution, Extraction & GC/MS Analysis  
Data Review Checklist (Example)ANALYSIS DATE: 6-05-11

MEETS CRITERIA?

1. DFTPP (50ng) VERIFY MEETS CRITERIA EVERY 12 HOURS D1XANE\  Y/N2. INITIAL CALIBRATION CURVE (MIN. 3 LEVELS) DATE: 010511.M

- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05
  - CCC 1,4-DICHLOROBENZENE < 30% RSD, 1,4-DIOXANE  $\leq$  20% RSD
  - ALL OTHER COMPOUNDS < 15% RSD OR USE CURVE ( $r^2 > 0.990$ )
- TAILING FACTOR. B/N BENZIDENE: 3.0

 Y/N Y/N Y/N Y/N Y/N Y/N Y/N

3. INITIAL CALIBRATION VERIFICATION (SEC. SOURCE) ANALYZED

 Y/N

4. CONTINUING CALIBRATION CHECK (EVERY 12 HOURS)

Y/N

- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05
- CCC 1,4-DICHLOROBENZENE < 20% D; 1,4-DIOXANE  $\leq$  20%
- IS 1,4-DCB-d4 AREA -50% TO -100% TO MID-POINT IN I. CAL
- IS 1,4-DCB-d4 RT  $\pm$  30 SEC. TO MID-POINT IN INITIAL CALB.

Y/N

5. METHOD BLANK

Y/N

- ANALYZE ONE PER BATCH (&lt; 20 SAMPLES)

Y/N

- 1,4-DIOXANE MUST BE &lt; REPORTING LIMIT

Y/N

Y/N

6. LOS/LOSD WITHIN LIMITS

Y/N

- MUST BE ANALYZED PER 20 SAMPLES/BATCH

Y/N

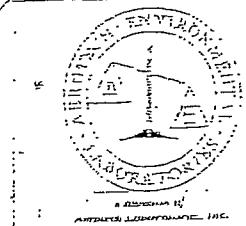
- % RECOVERY WITHIN 80 - 120% LIMITS

Y/N

- RPD WITHIN LIMITS ( $\leq$  25 RPD)

Y/N

Continued on next page



Department: Semi-Volatiles

Page 22 of 22

SOP  
Number/Revision  
05-020.03Title: EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS AnalysisDate issued:  
March 2007Expiration Date:  
March 2009

NOT TO BE PHOTOCOPIED

## 7. MS/MSD

- MUST BE ANALYZED PER 20 SAMPLES/BATCH
- % RECOVERY WITHIN 70-130% LIMITS
- RPD WITHIN LIMITS ( $\leq 25$  RPD)

Y/N

Y/N

Y/N

## 8. SAMPLES

- EXTRACTED WITHIN 7 DAYS OF SAMPLING
- ANALYZED WITHIN 40 DAYS OF EXTRACTION
- IS 1,4-DCB-d4 RT  $\pm$  30 SECs AND IS AREA  $\pm$  50% TO  $\pm$  100% TO  
CONT. CAL
- SURROGATE RECOVERIES WITHIN LIMITS

Y/N

Y/N

Y/N

Y/N

✓✓

Y/N

## 9. TUNE INJECTED WITHIN 12hr TIME PERIOD

## COMMENTS

ANALYST:

A

DATE:

1-5-11

REVIEWER:

## Response Factor Report GCMS14

Method Path : D:\Ynsdchem\Y\GCMS14\METHODS\14DIOXANE\

Method File : 010511.M ✓

Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

Last Update : Wed Jan 05 13:29:49 2011

Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
										ISTD	
1) I	1,4-Dioxane-d8										
2) C	1,4-Dioxane	0.973	1.050	1.052	1.057	1.050	1.011	0.998	1.018	0.940	1.018
											4.12
3) I	1,4-Dichlorobenzene									ISTD	
4) C*	1,4-Dichlorobenzene	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644
5) P	N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195
6) S	Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792
											4.43
											5.28
											4.99

(#) = Out of Range

C 1.5-11

1/05/11

## Response Factor Report GCMS14

Method Path : D:\msdchem\GCMS14\METHODS\14DIOXANE  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1) I	1,4-Dioxane-d8									ISTD	
2)	C	1,4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940
											1.018
											4.12
3)	I	1,4-Dichlorobenzene								ISTD	
4)	C*	1,4-Dichlorobenzoic acid	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496
5)	P	N-Nitrosodi-naphthalene	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171
6)	S	Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697

(#= Out of Range

WPS�  
 µm shift  
 on 2- 2k-4

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D ✓
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D ✓
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D ✓
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D ✓
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D ✓
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D ✓
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D ✓
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D ✓
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D ✓
10	CC	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D ~

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	1/05/11
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011	
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011	
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011	
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011	
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011	
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011	1/5/11
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011	
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011	
10	CC	Jan 05 13:29 2011	Jan 05 12:20 2011	

010511.M Wed Jan 05 13:33:03 2011

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D
10	CC	10	20	R:\022511\02251108.D <i>and to update due to pt shift</i>

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	105112011
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011	
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011	
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011	
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011	
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011	
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011	
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011	
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011	
10	CC	Feb 28 10:27 2011	Feb 28 10:27 2011	25 Feb 2011 6:23 pm ✓

010511D.M Mon Feb 28 10:59:27 2011

191 of 285  
*1/2011*

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M  
 Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1, 4-Dioxane-d8	96	2.975	1.000	A	1	A	B
2 C	1, 4-Dioxane	88	3.028	1.018	A	2	A	B
3 I	1, 4-Dichlorobenzene-d4	152	6.092	1.000	A	0	A	B
4 C*	1, 4-Dichlorobenzene	146	6.104	1.002	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.422	1.054	A	1	A	B
6 S	Nitrobenzene-d5	82	6.557	1.076	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R:T. & Q Q = Qvalue L = Largest A = All

)10511.M Wed Jan 05 13:33:14 2011

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12

Misc Info 1,4-DIOXANE  
 Instrument Name GCMS14

	CCV Response	ICAL Response	0.5X	2X	PASS/FAIL
Internal Standard 1,4-Dichlorobenzene-d4	243008	243008	121504	486016	PASS
Internal Standard 1,4-Dichlorobenzene-d4	RT 6.09	RT 6.09	-0.5min 5.59	+0.5min 6.59	PASS

update

or 1 - 5 c11

193 of 285  
12 PM

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem1\GCMS14\DATA\010511\  
 Operator CL  
 Date Acquired 1/5/2011 12:12  
 Misc Info 1,4-DIOXANE  
 Instrument Name GCMS14

NAME	RT	10ug/mL PU00063 01051110.D D:\msdchem1\GCMS14\DATA\010511\ mid-RT				PASS/FAIL
		CCV	RRT	010511.M	AGREE	
		Value	-0.06	0.06	(Target/IS)	
IS 1,4-Dioxane-d8	2.975 ✓	1.0178	1.0178 ~	0.9578	1.0778	<-PASS
1,4-Dioxane	3.028 ✓					
IS 1,4-Dichlorobenzene-d4	6.092 ✓	1.0019	1.0019 -	0.9419	1.0619	<-PASS
1,4-Dichlorobenzene	6.104 ✓	1.0541	1.0541 -	0.9941	1.1141	<-PASS
N-Nitrosodi-n-propylamine	6.422 ✓	1.0763	1.0763	1.0163	1.1363	S-PASS
Nitrobenzene-d5	6.557 ✓					

Update only.  
 Added in Revised  
 review checklist for  
 1,4-Dioxane

03-09-11.

20911

194 of 285

TestAmerica  
Phoenix

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\Msdchem\1\GCMS14\sequence\010511.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\010511\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run      On A Barcode Mismatch  
(X) Full Method            (X) Inject Anyway  
( ) Reprocessing Only      ( ) Don't Inject

Line	Sample	Sample Name/Misc Info
1)	Sample	1 01051101 DB5MS14 DCM
2)	Sample	2 01051102 DB5MS14 DCM
3)	Sample	3 01051103 DB5MS14 25ng tune pu00017 ✓ 1-5-11
4)	Sample	4 01051104 DB5MS14 25ng TUNE PU00017 ✓ 1-5-11
5)	Sample	5 01051105 DIOXANE BLANK
6)	Sample	6 01051106 DIOXANE 0.5ug/mL PU00059
7)	Sample	7 01051107 DIOXANE 1.0ug/mL PU00060
8)	Sample	8 01051108 DIOXANE 2.0ug/mL PU00061
9)	Sample	9 01051109 DIOXANE 4.0ug/mL PU00062
10)	Sample	10 01051110 DIOXANE 10ug/mL PU00063
11)	Sample	11 01051111 DIOXANE 20ug/mL PU00064
12)	Sample	12 01051112 DIOXANE 30ug/mL PU00065
13)	Sample	13 01051113 DIOXANE 40ug/mL PU00066
14)	Sample	14 01051114 DIOXANE 100ug/mL PU00067
15)	Sample	15 01051115 DIOXANE QCS10ug/mL PU00068 ✓ 1-5-11
16)	Sample	1 01051116 DIOXANE 10ug/mL PU00063ccv PCM
17)	Sample	2 01051117 DIOXANE 10ug/mL PU00063ccv
18)	Sample	3 01051118 DIOXANE 11A0067-BLK1
19)	Sample	4 01051119 DIOXANE PTL1256-03RE1
20)	Sample	5 01051120 DIOXANE PTL1256-04RE1
21)	Sample	6 01051121 DIOXANE PTL1256-06RE1
22)	Sample	7 01051122 DIOXANE PTL1256-07RE1
23)	Sample	8 01051123 DIOXANE PTL1262-01RE1
24)	Sample	9 01051124 DIOXANE PTL1262-02RE1
25)	Sample	10 01051125 DIOXANE PTL1256-10
26)	Sample	11 01051126 DIOXANE PTL1262-01
27)	Sample	12 01051127 DIOXANE PTL1262-02

Sequence Reviewed By: a

Date: 1-6-11

195 of 285

Date Analyzed: 1-6-11

Analyst: a

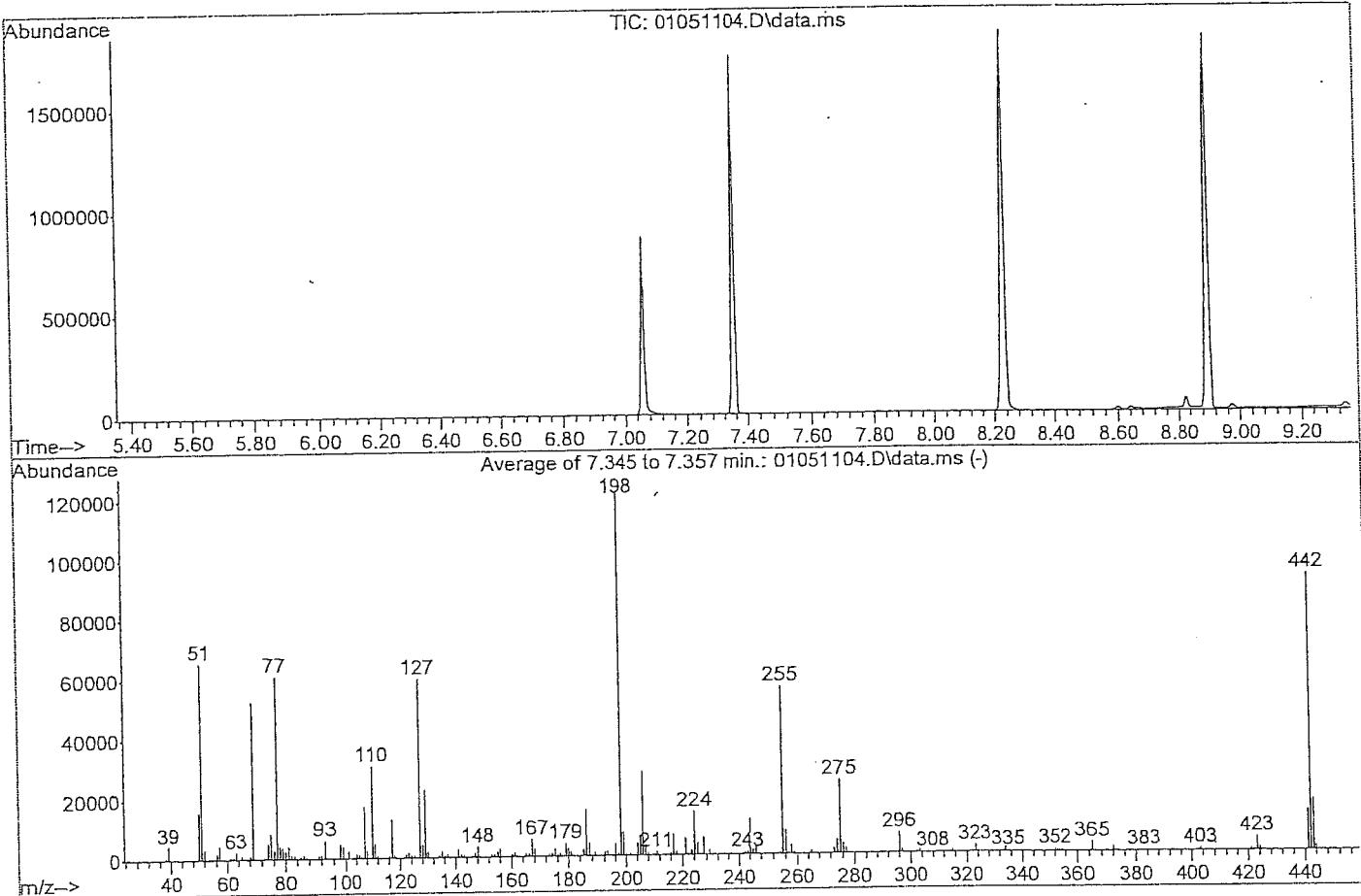
Date Run: 1-5-11

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA.:ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Fri Sep 10 17:23:33 2010



AutoFind: Scans 963, 964, 965; Background Corrected with Scan 958

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	65567	PASS
68	69	0.00	2	1.8	948	PASS
69	198	0.00	100	43.2	52531	PASS
70	69	0.00	2	0.4	221	PASS
127	198	40	60	49.2	59789	PASS
197	198	0.00	1	0.7	889	PASS
198	198	100	100	100.0	121514	PASS
199	198	5	9	6.5	7948	PASS
275	198	10	30	20.3	24613	PASS
365	198	1	100	2.6	3102	PASS
441	443	0.01	100	78.5	13579	PASS
442	198	40	100	76.1	92525	PASS
443	442	17	23	18.7	17299	PASS

196 of 285

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051104.D

Acq On : 5 Jan 2011 10:19 am

Operator : CL

Sample : 25ng TUNE PU00017

Misc :

ALS Vial : 4 Sample Multiplier: 1

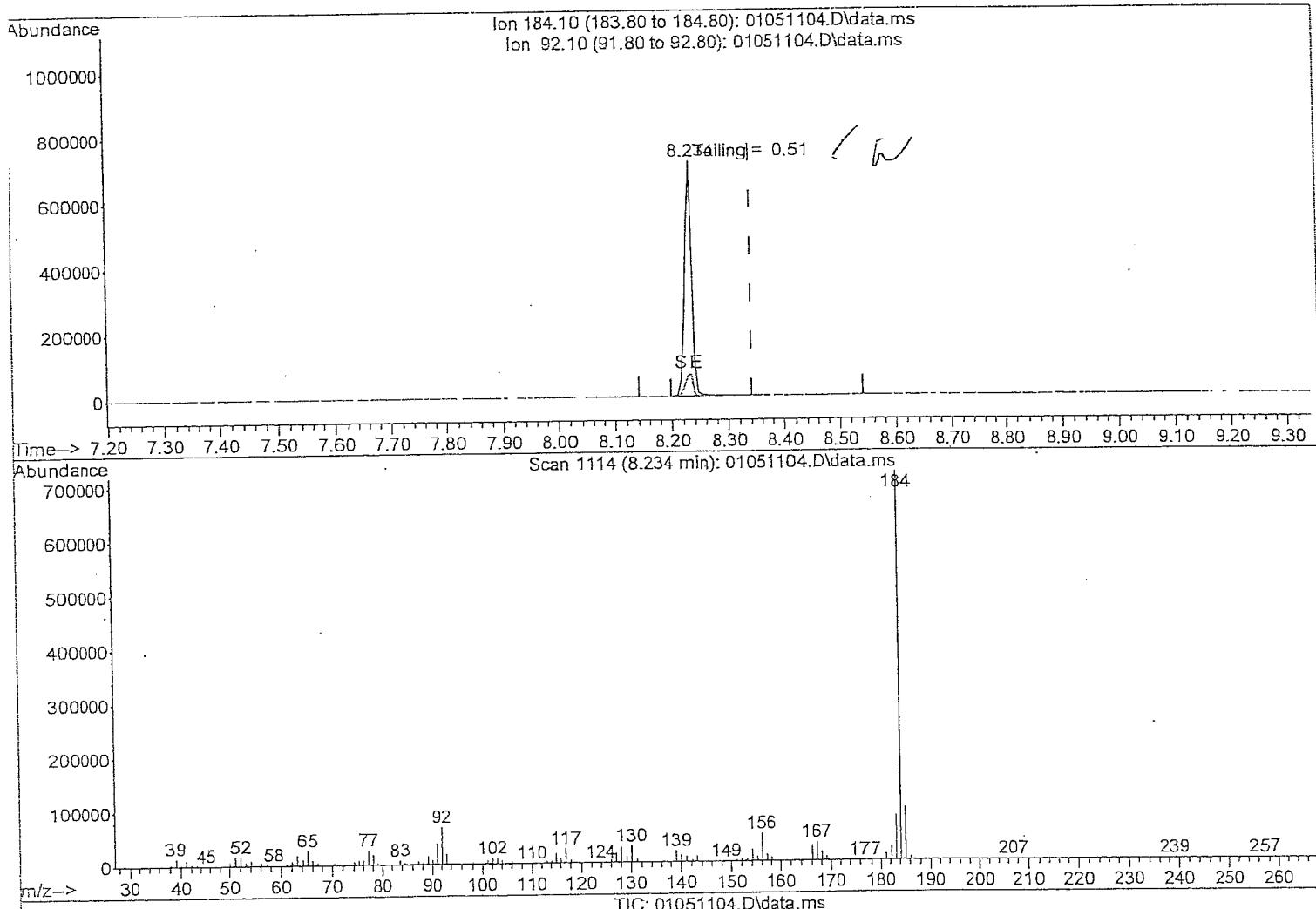
Quant Time: Jan 05 11:46:05 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M

Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%

QLast Update : Fri Sep 10 17:23:33 2010

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.234min (-0.106) 7.68

response 603050

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.42
0.00	0.00	0.00
0.00	0.00	0.00

197 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511

Data File : 01051105.D

Acq On : 5 Jan 2011 10:44 am

Operator : CL

Sample : BLANK

Misc : 1, 4-DIOXANE

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.969	96	300515	20.00	ug/mL	0.00
3) 1, 4-Dichlorobenzene-d4	6.092	152	231052	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2.999	88	49	0.00	ug/mL#	1
4) 1, 4-Dichlorobenzene	6.092	146	306	0.01	ug/mL#	1

(#= qualifier out of range (m)= manual integration (+)= signals summed

01-5-11

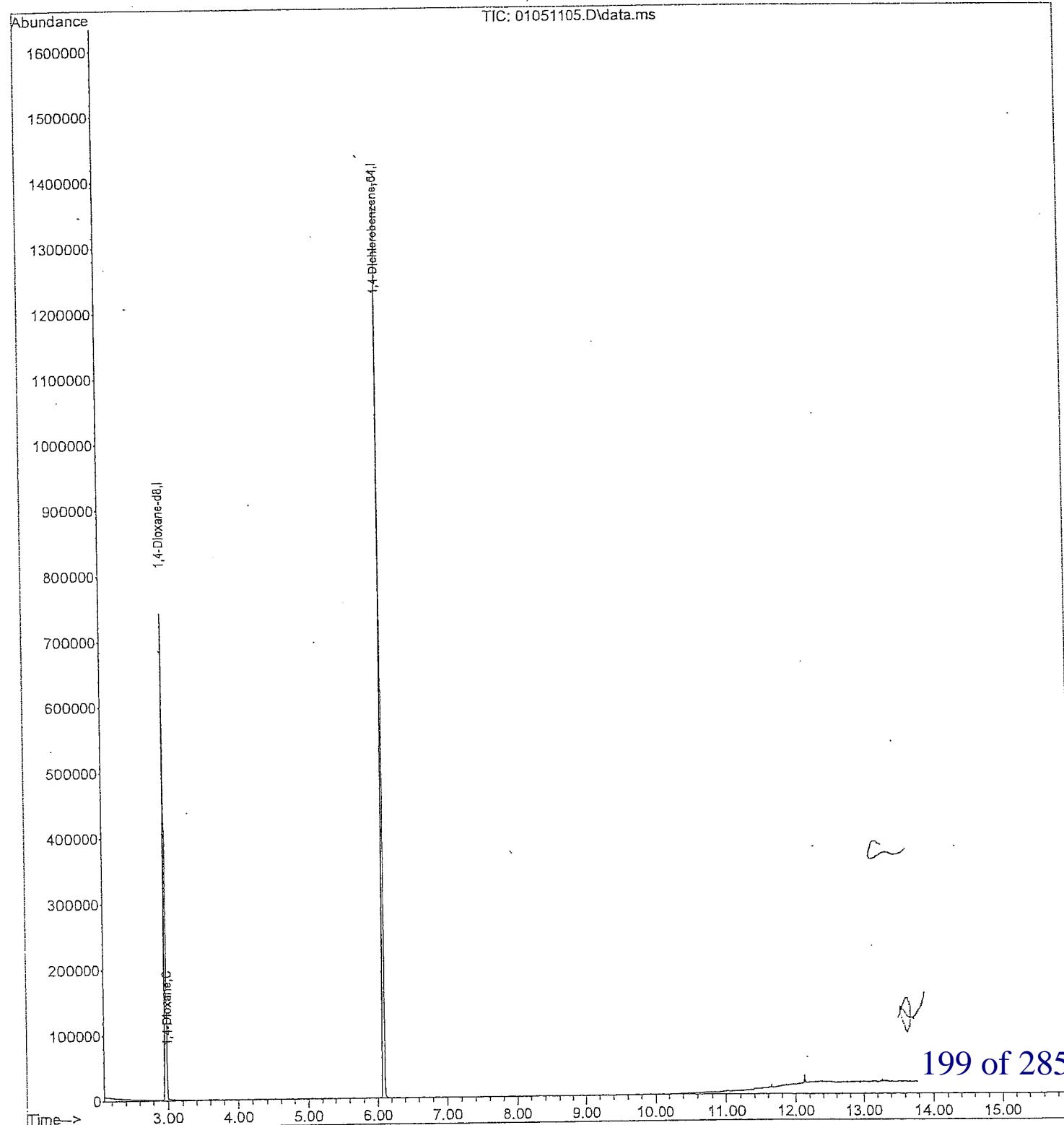
ANAL

198 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051105.D  
Acq On : 5 Jan 2011 10:44 am  
Operator : CL  
Sample : BLANK  
Misc : 1, 4-DIOXANE  
ALS Vial : 5 Sample Multiplier: 1

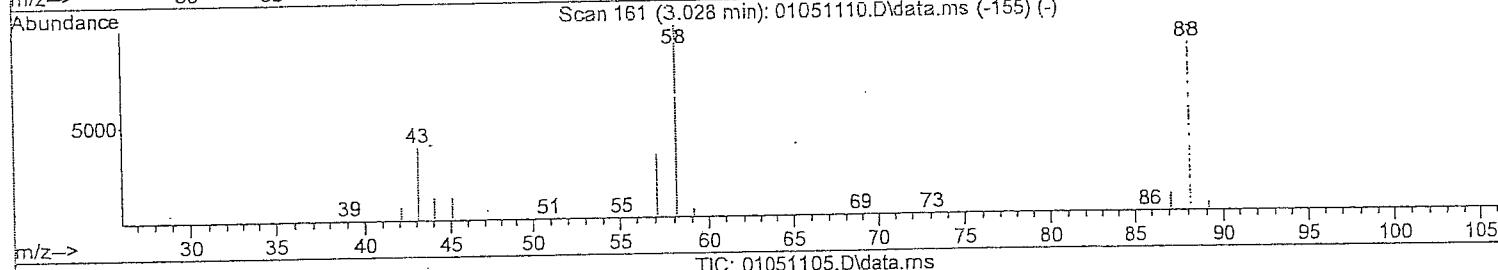
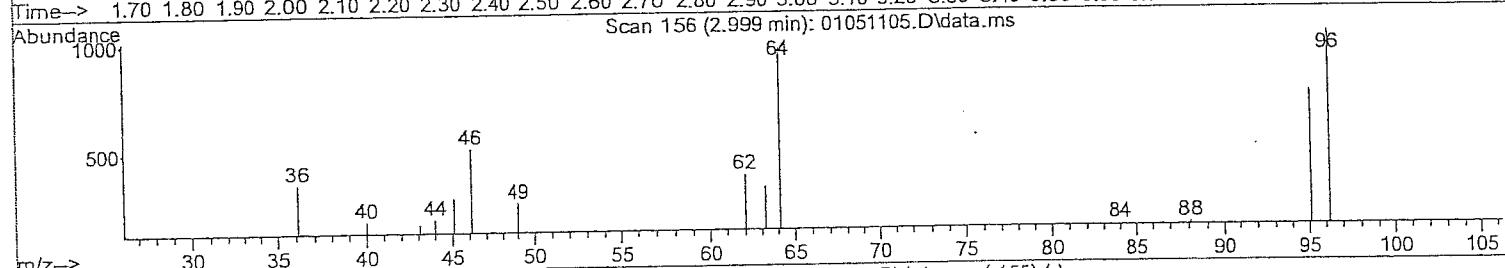
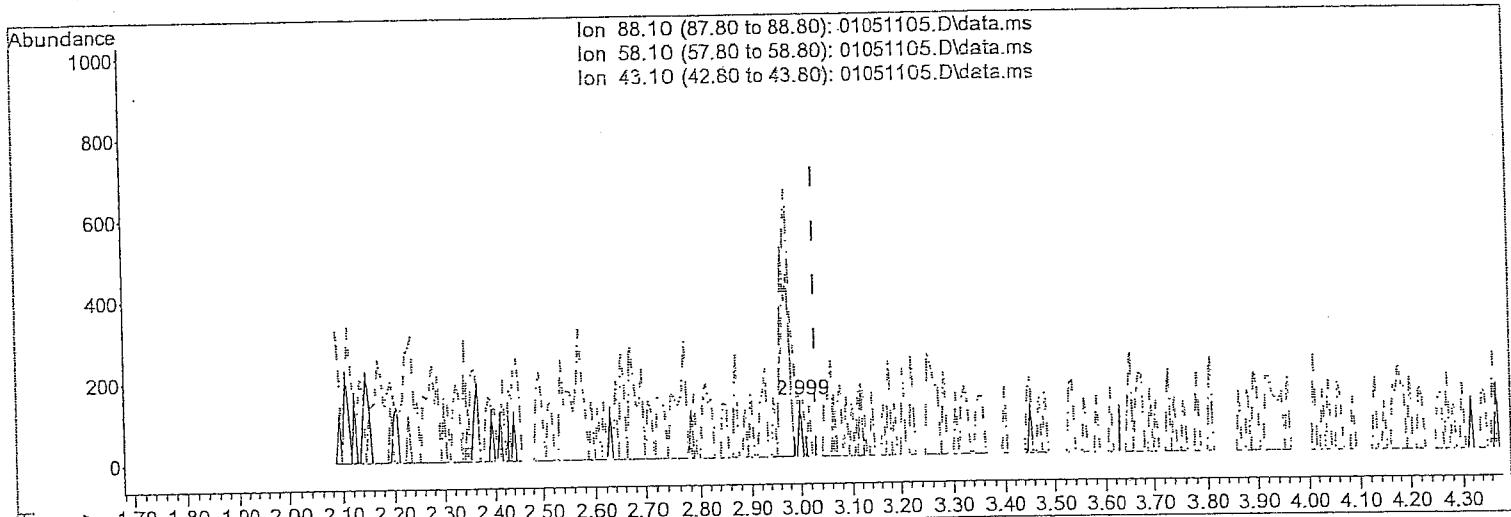
Quant Time: Jan 05 13:45:56 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270 (1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 13:29:49 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051105.D  
 Acq On : 5 Jan 2011 10:44 am  
 Operator : CL  
 Sample : BLANK  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 13:29:49 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.999min (-0.029) 0.00ug/mL

response 49

Ion	Exp%	Act%
88.10	100	100
58.10	97.60	1263.27#
43.10	39.30	2171.43#
0.00	0.00	0.00

2/2  
1/5/11

1/2/10/11  
200 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1, 4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 963	96	318261	20.00	ug/mL	0.02
3) 1, 4-Dichlorobenzene-d4	6. 092	152	240601	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	20080	0.62	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 016	88	7745	0.48	ug/mL	96
4) 1, 4-Dichlorobenzene	6. 104	146	19858	0.51	ug/mL	87
5) N-Nitrosodi-n-propylamine	6. 422	70	12932	0.61	ug/mL	98

(##) = qualifier out of range (m) = manual integration (+) = signals summed

OLYMPUS

201 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1,4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

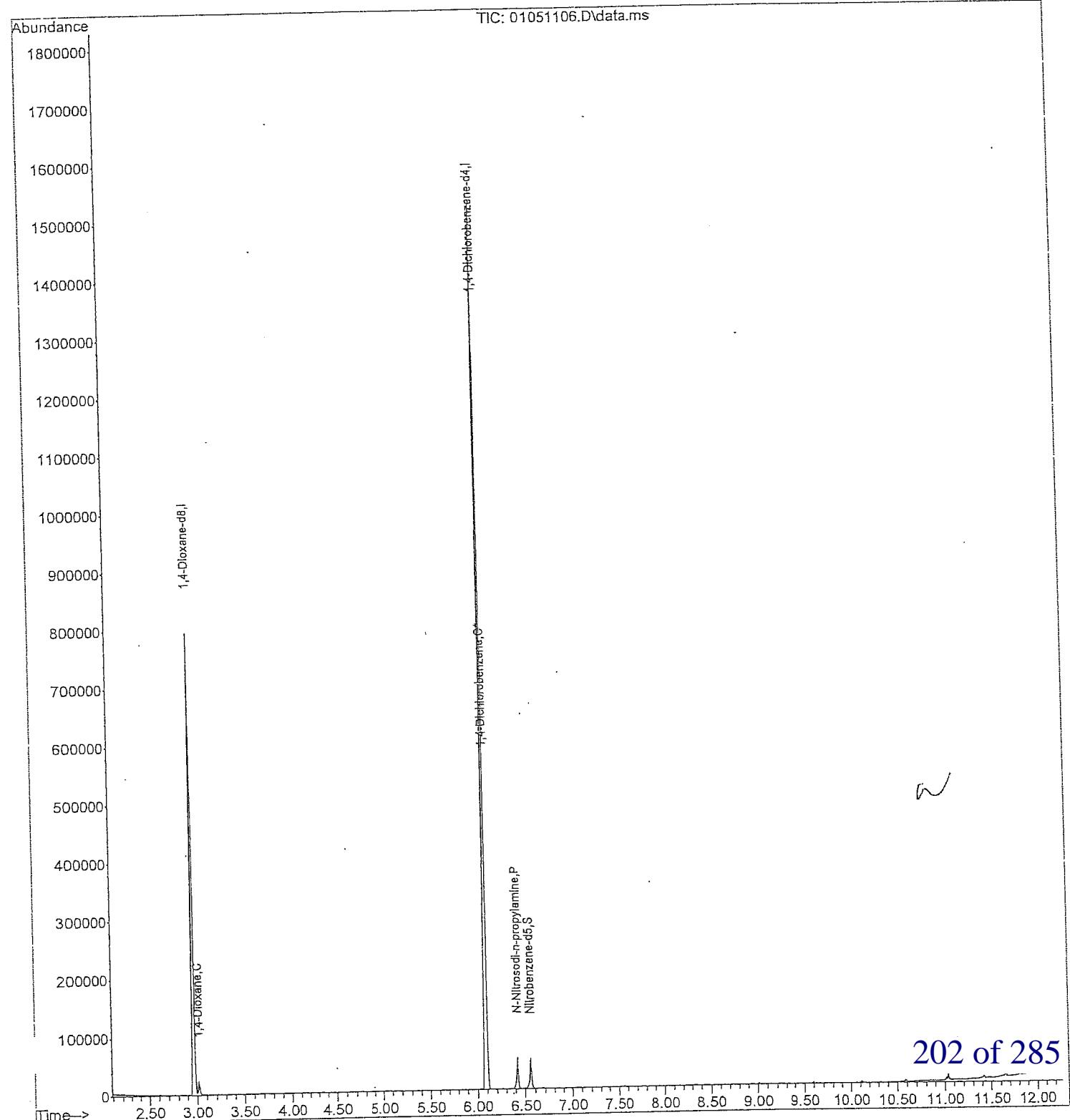
Quant Time: Jan 05 11:25:57 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051107.D

Acq On : 5 Jan 2011 11:32 am

Operator : CL

Sample : 1.0ug/mL PU00060

Misc : 1,4-DIOXANE

ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.969	96	283387	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	213017	10.00	ug/mL	0.00
<b>System Monitoring Compounds</b>						
6) Nitrobenzene-d5	6.557	82	36439	1.28	ug/mL	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	3.022	88	14877	1.04	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	35480	1.03	ug/mL	95
5) N-Nitrosodi-n-propylamine	6.422	70	23862	1.28	ug/mL	96

(#= qualifier out of range (m)= manual integration (+)= signals summed

M. 15.11

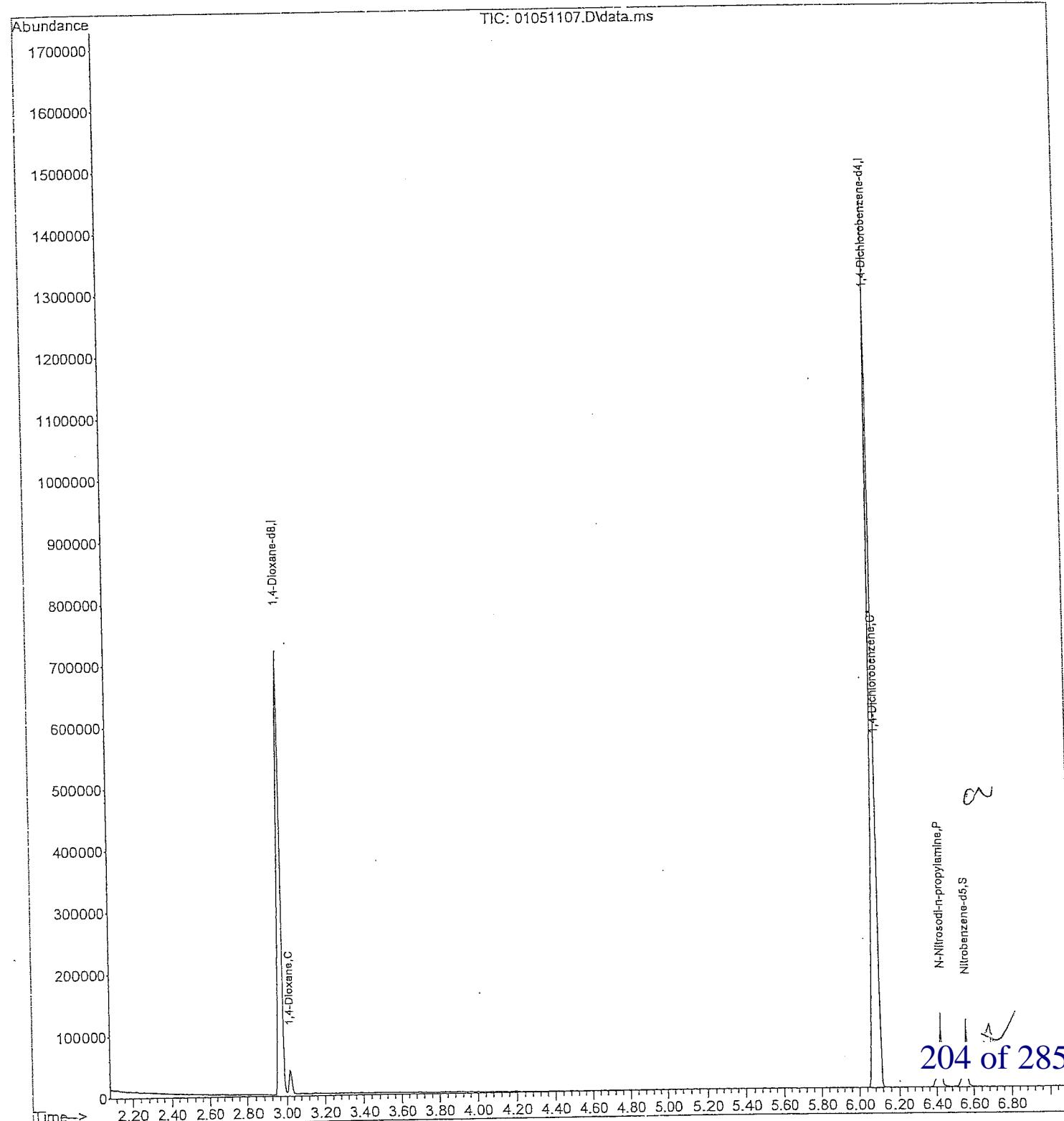
RGA

203 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051107.D  
Acq On : 5 Jan 2011 11:32 am  
Operator : CL  
Sample : 1.0ug/mL PU00060  
Misc : 1, 4-DIOXANE  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1, 4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.975	96	323796	20.00	ug/mL	0.03
3) 1, 4-Dichlorobenzene-d4	6.087	152	240424	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	92526	2.87	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3.022	88	34074	2.09	ug/mL	99
4) 1, 4-Dichlorobenzene	6.104	146	83920	2.15	ug/mL	99
5) N-Nitrosodi-n-propylamine	6.416	70	59969	2.84	ug/mL	99

(#= qualifier out of range (m)= manual integration (+)= signals summed

201.511

205 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1, 4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

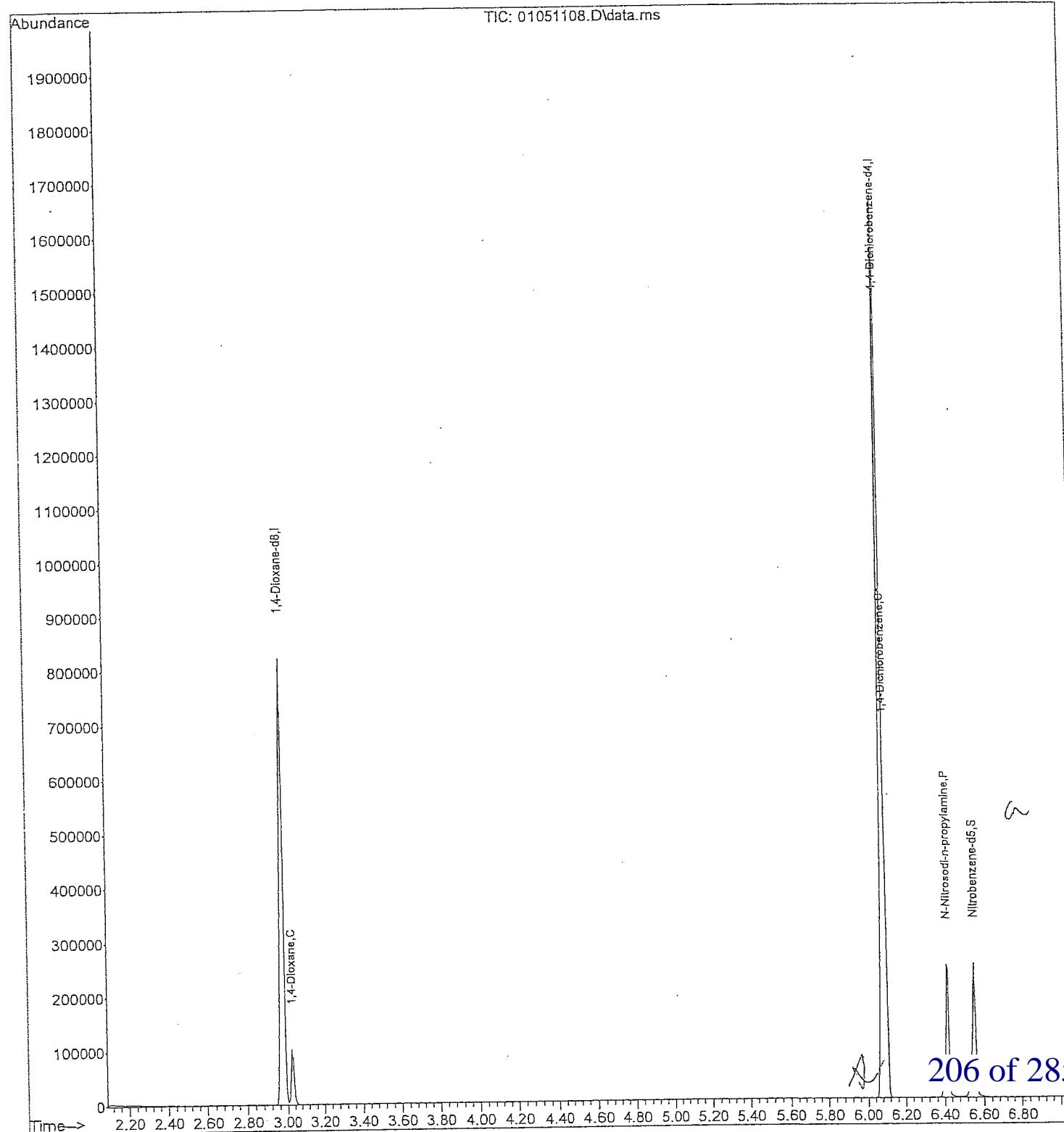
Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1,4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 12:19:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.957	96	304589	20.00	ug/mL	0.01
3) 1,4-Dichlorobenzene-d4	6.092	152	229794	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	173101	5.62	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.004	88	65016	4.24	ug/mL	100
4) 1,4-Dichlorobenzene	6.104	146	157766	4.23	ug/mL	98
5) N-Nitrosodi-n-propylamine	6.422	70	115445	5.73	ug/mL	98

(#= qualifier out of range (m)= manual integration (+)= signals summed

*6/15/11*

207 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1, 4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

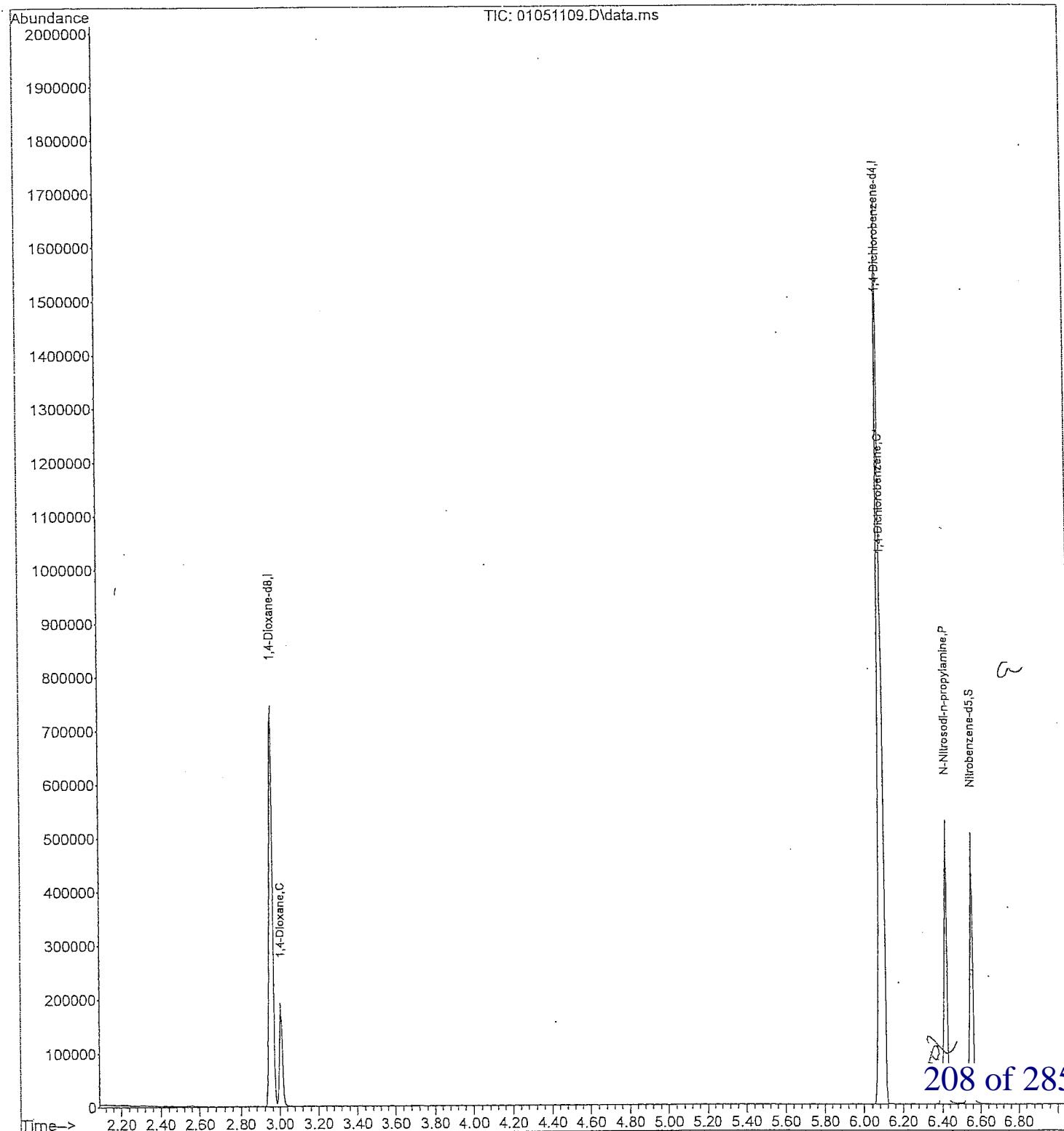
Quant Time: Jan 05 12:19:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270 (1, 4-DIOXANE) .CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 0105110.D

Acq On : 5 Jan 2011 12:12 pm

Operator : CL

Sample : 10ug/mL PU00063

Misc : 1,4-DIOXANE

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.975	96	326940	20.00	ug/mL	0.03
3) 1,4-Dichlorobenzene-d4	6.092	152	243008	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	454083	13.94	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.028	88	171569	10.42	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	404965	10.27	ug/mL	99
5) N-Nitrosodi-n-propylamine	6.422	70	304989	14.31	ug/mL	100

(#= qualifier out of range (m)= manual integration (+)= signals summed

C1-S-11

209 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051110.D

Acq On : 5 Jan 2011 12:12 pm

Operator : CL

Sample : 10ug/mL PU00063

Misc : 1,4-DIOXANE

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511  
 Data File : 01051111.D  
 Acq On : 5 Jan 2011 12:25 pm  
 Operator : CL  
 Sample : 20ug/mL PU00064  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 892	96	258958	20.00	ug/mL	-0.05
3) 1, 4-Dichlorobenzene-d4	6. 092	152	185062	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 563	82	670408	27.02	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 951	88	261828	20.07	ug/mL	100
4) 1, 4-Dichlorobenzene	6. 104	146	613271	20.43	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 428	70	453173	27.92	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

211 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051111.D

Acq On : 5 Jan 2011 12:25 pm

Operator : CL

Sample : 20ug/mL PU00064

Misc : 1,4-DIOXANE

ALS Vial : 11 Sample Multiplier: 1

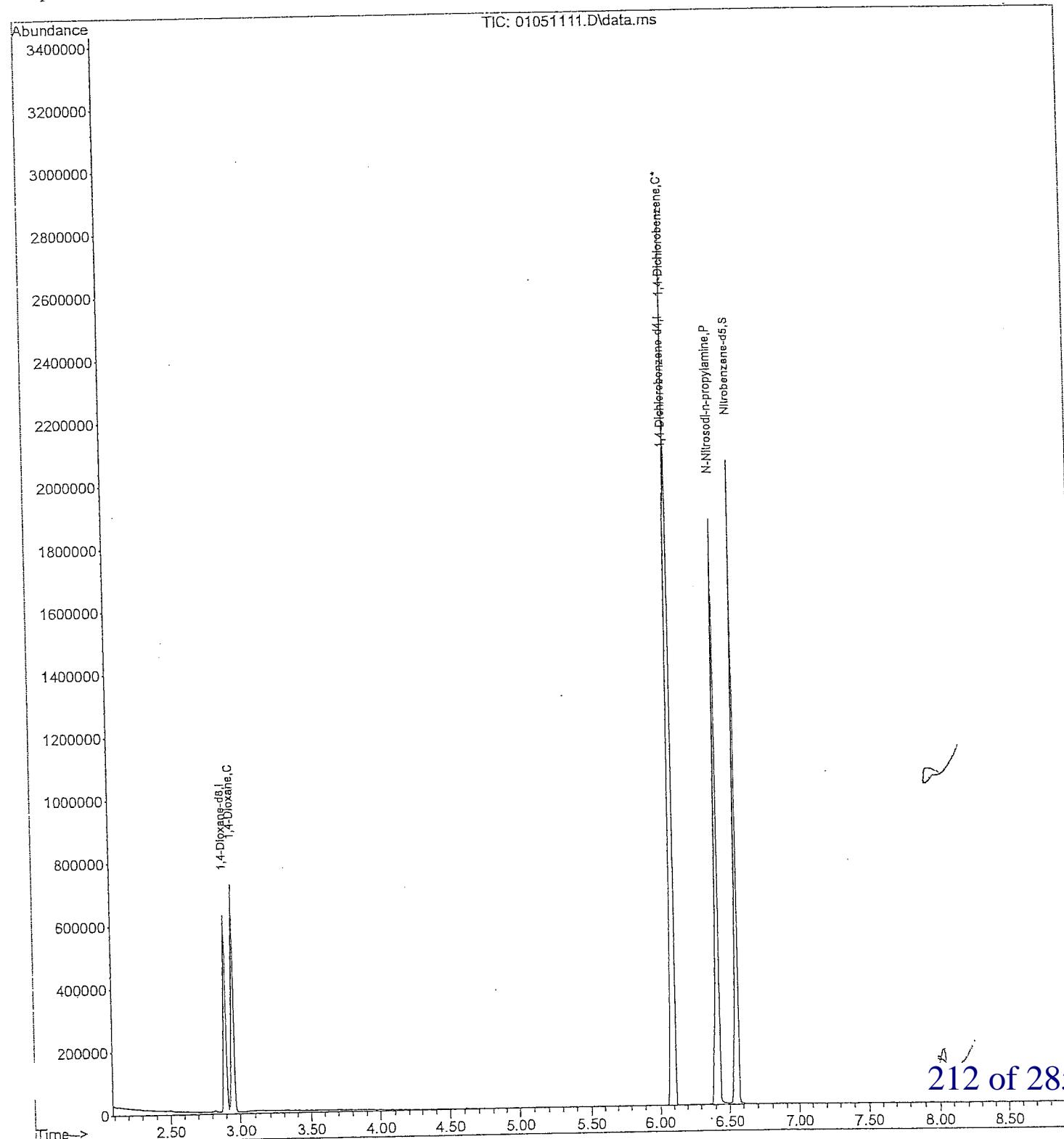
Quant Time: Jan 05 12:43:52 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051112.D  
 Acq On : 5 Jan 2011 12:41 pm  
 Operator : CL  
 Sample : 30ug/mL PU00065  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	330882	20.00	ug/mL	0. 03
3) 1, 4-Dichlorobenzene-d4	6. 092	152	235894	10.00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 563	82	1276344	40.36	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane	3. 040	88	495415	29.72	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 104	146	1137949	29.74	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 428	70	858130	41.47	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

01.5.11

213 of 285

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051112.D

Acq On : 5 Jan 2011 12:41 pm

Operator : CL

Sample : 30ug/mL PU00065

Misc : 1, 4-DIOXANE

ALS Vial : 12 Sample Multiplier: 1

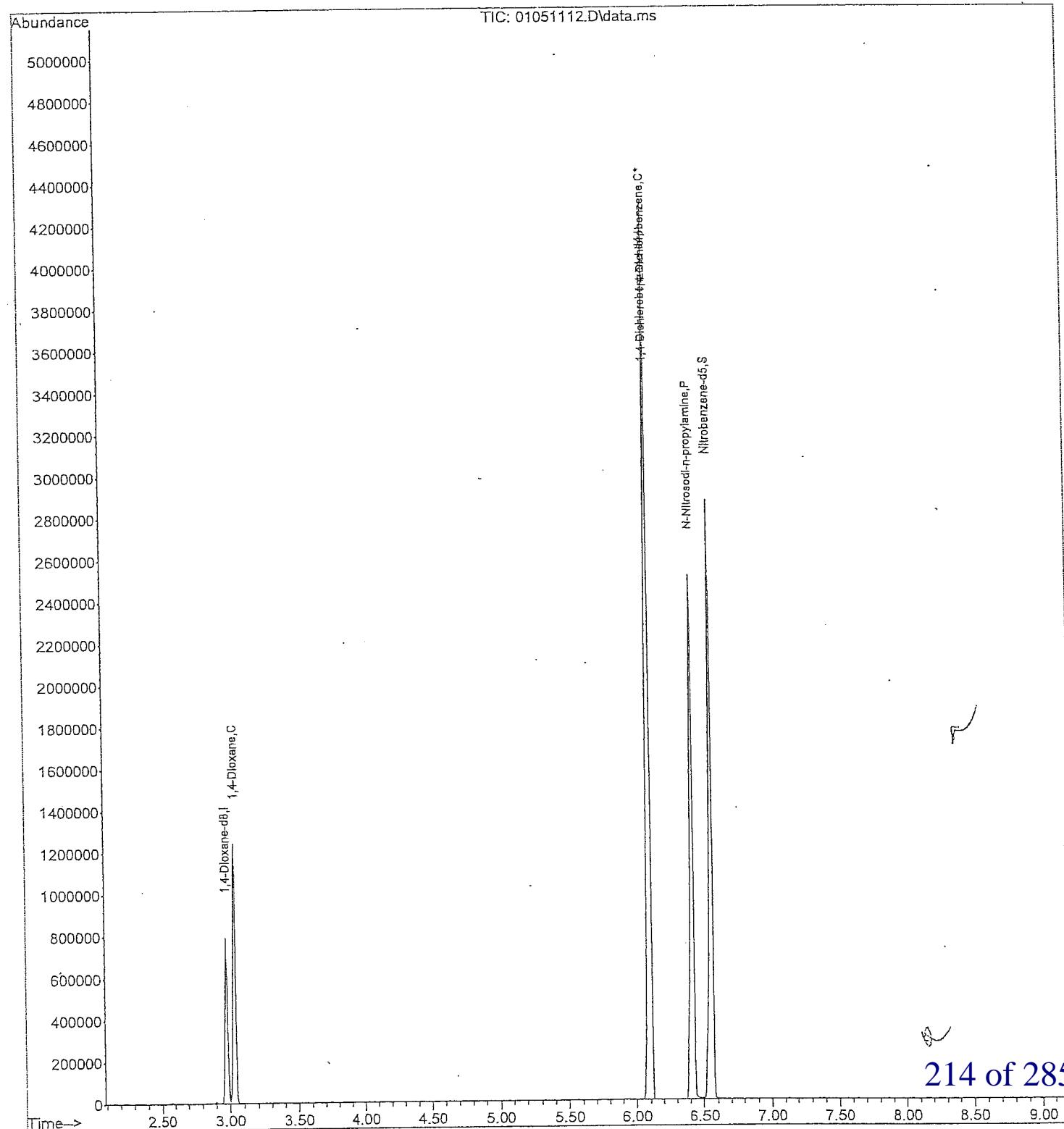
Quant Time: Jan 05 12:57:20 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1, 4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 875	96	235570	20. 00	ug/mL	-0. 07
3) 1, 4-Dichlorobenzene-d4	6. 093	152	170137	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 569	82	1198475	52. 55	ug/mL	0. 01
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 940	88	479723	40. 42	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 110	146	1084666	39. 30	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 434	70	813006	54. 48	ug/mL	100

(##) = qualifier out of range (m) = manual integration (+) = signals summed

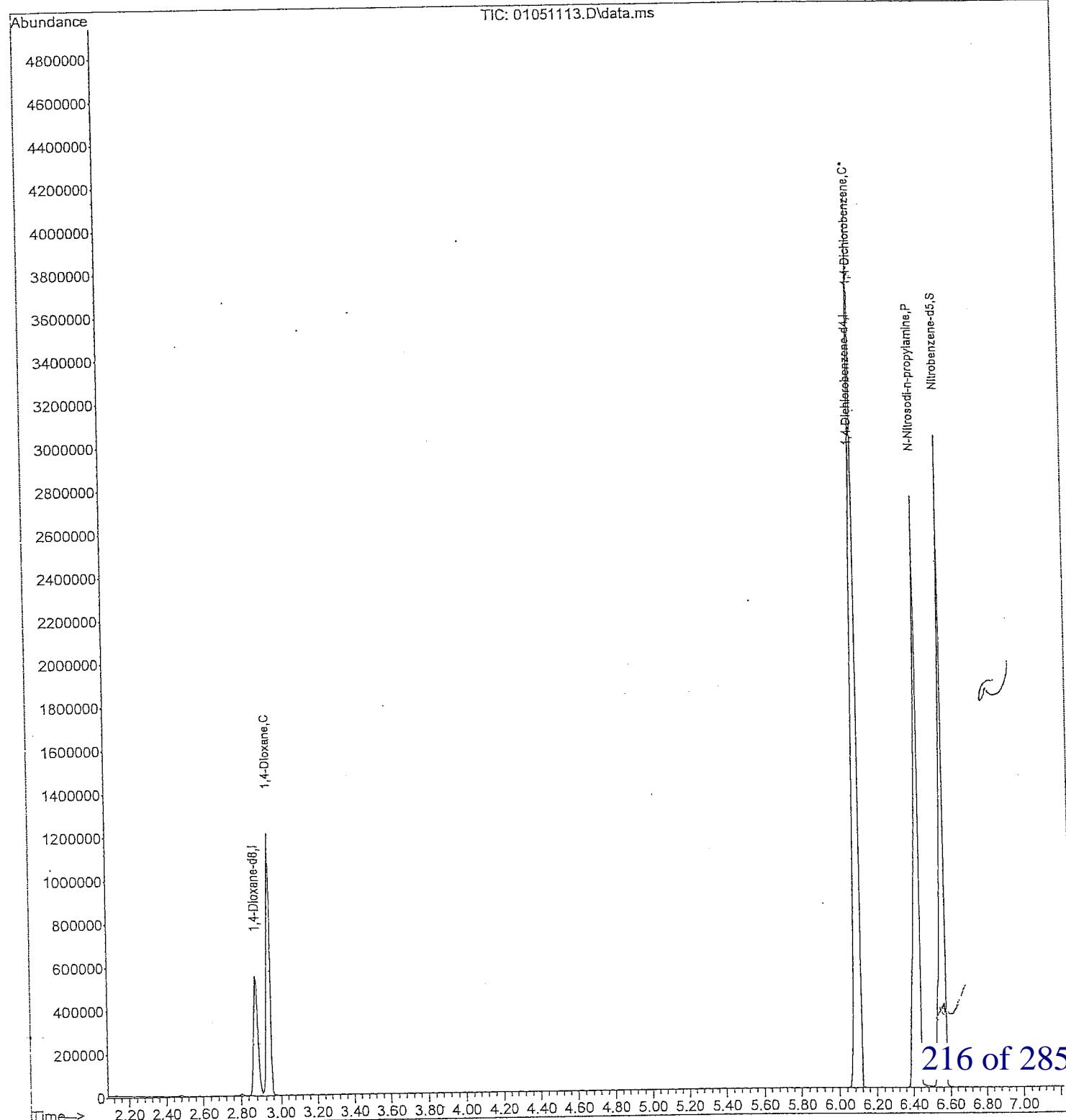
1/5/11

215 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051113.D  
Acq On : 5 Jan 2011 12:58 pm  
Operator : CL  
Sample : 40ug/mL PU00066  
Misc : 1, 4-DIOXANE  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm.

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.787	96	203549m	20.00	ug/mL	-0.16
3) 1, 4-Dichlorobenzene-d4	6.092	152	140662	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.581	82	2386881	126.59	ug/mL	0.02
Target Compounds						Qvalue
2) 1, 4-Dioxane	2.863	88	957052m	93.33	ug/mL	
4) 1, 4-Dichlorobenzene	6.110	146	2103702	92.19	ug/mL	100
5) N-Nitrosodi-n-propylamine	6.451	70	1646696	133.46	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

CL. S. 11  
2/17/11

2/17/11

217 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

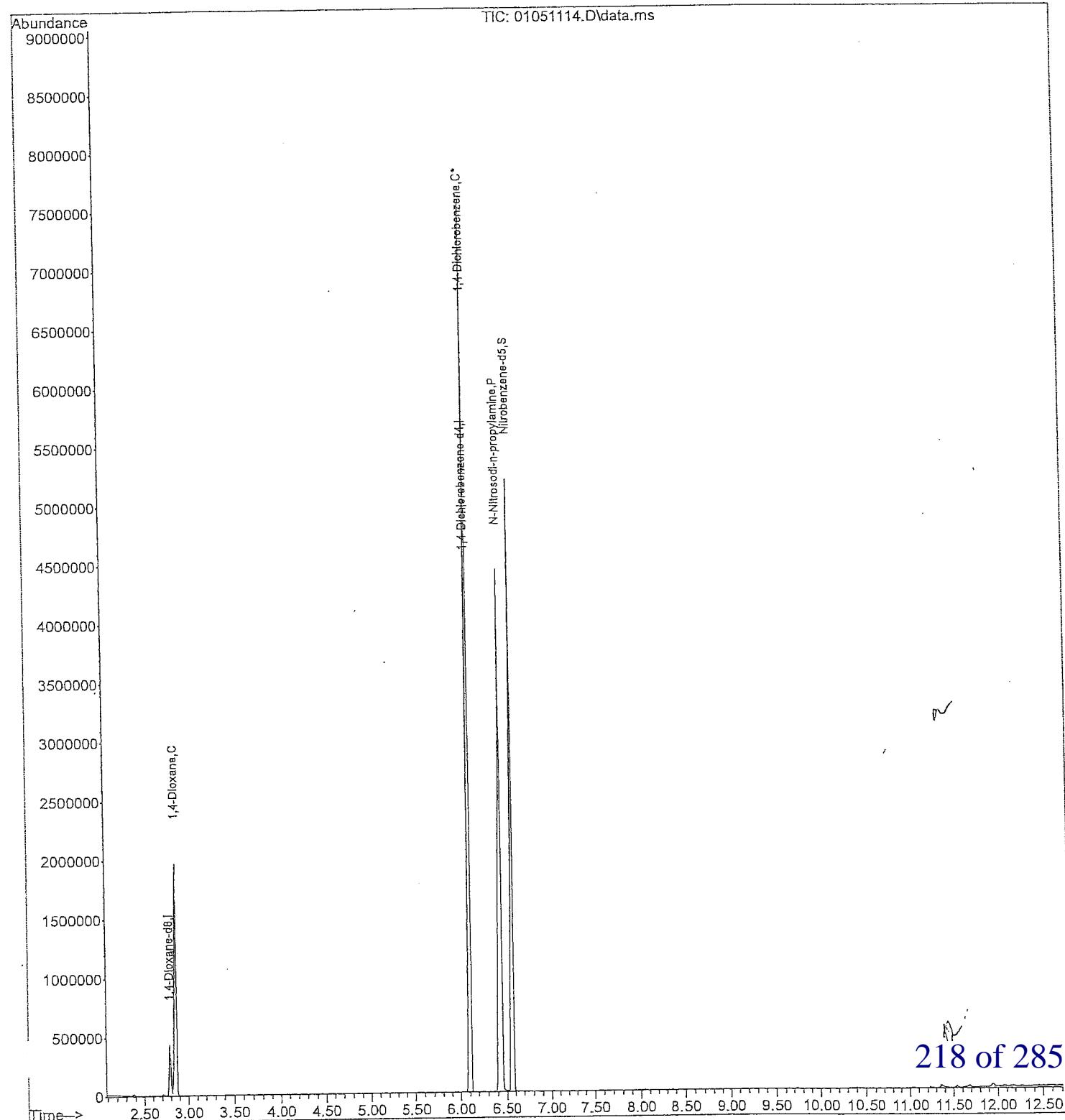
Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270 (1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

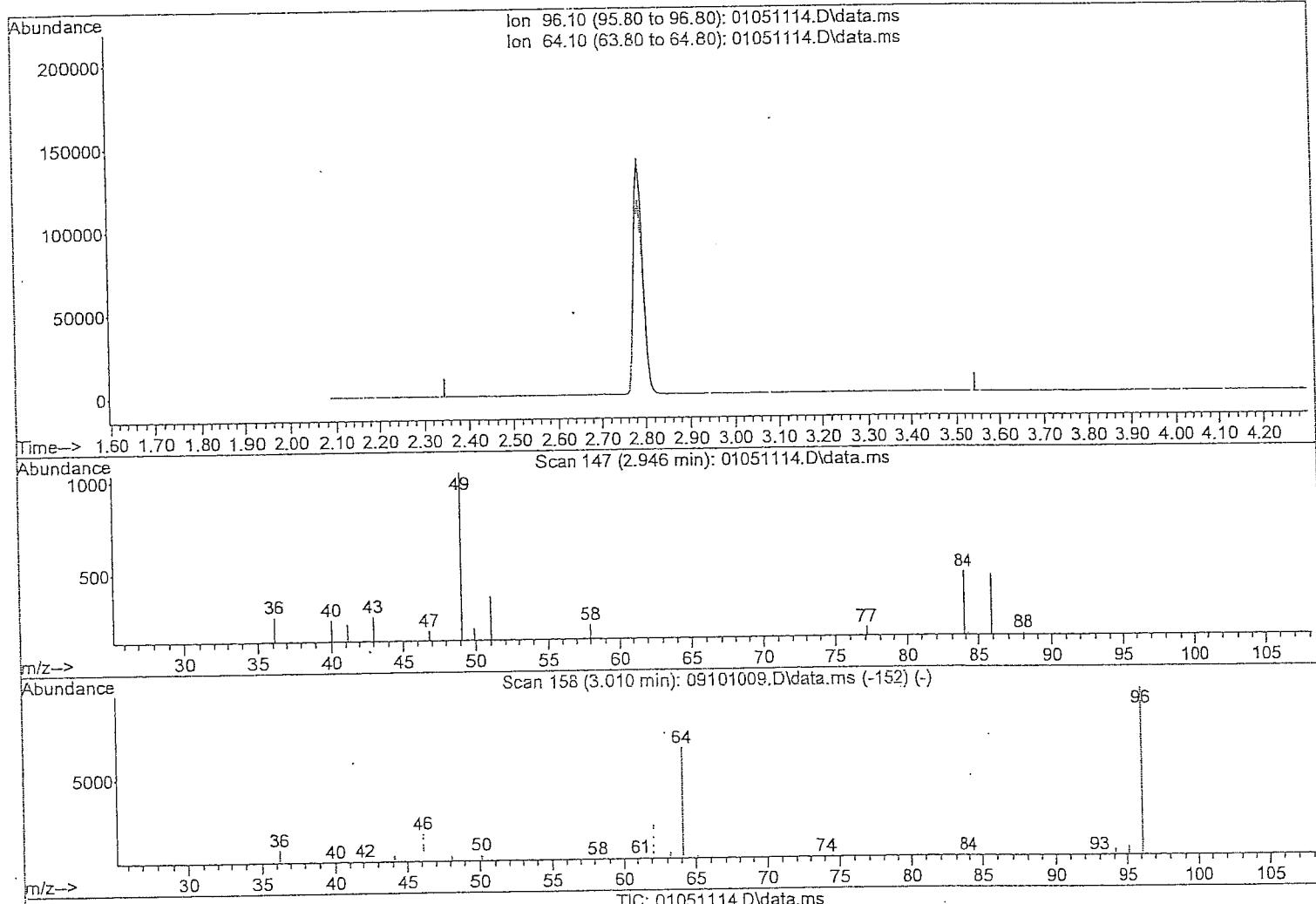
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.946min (-2.946) 0.00ug/mL

response 0

Ion	Exp%	Act%
96.10	100	0.00
64.10	83.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

B

1/5/11  
219 of 285

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

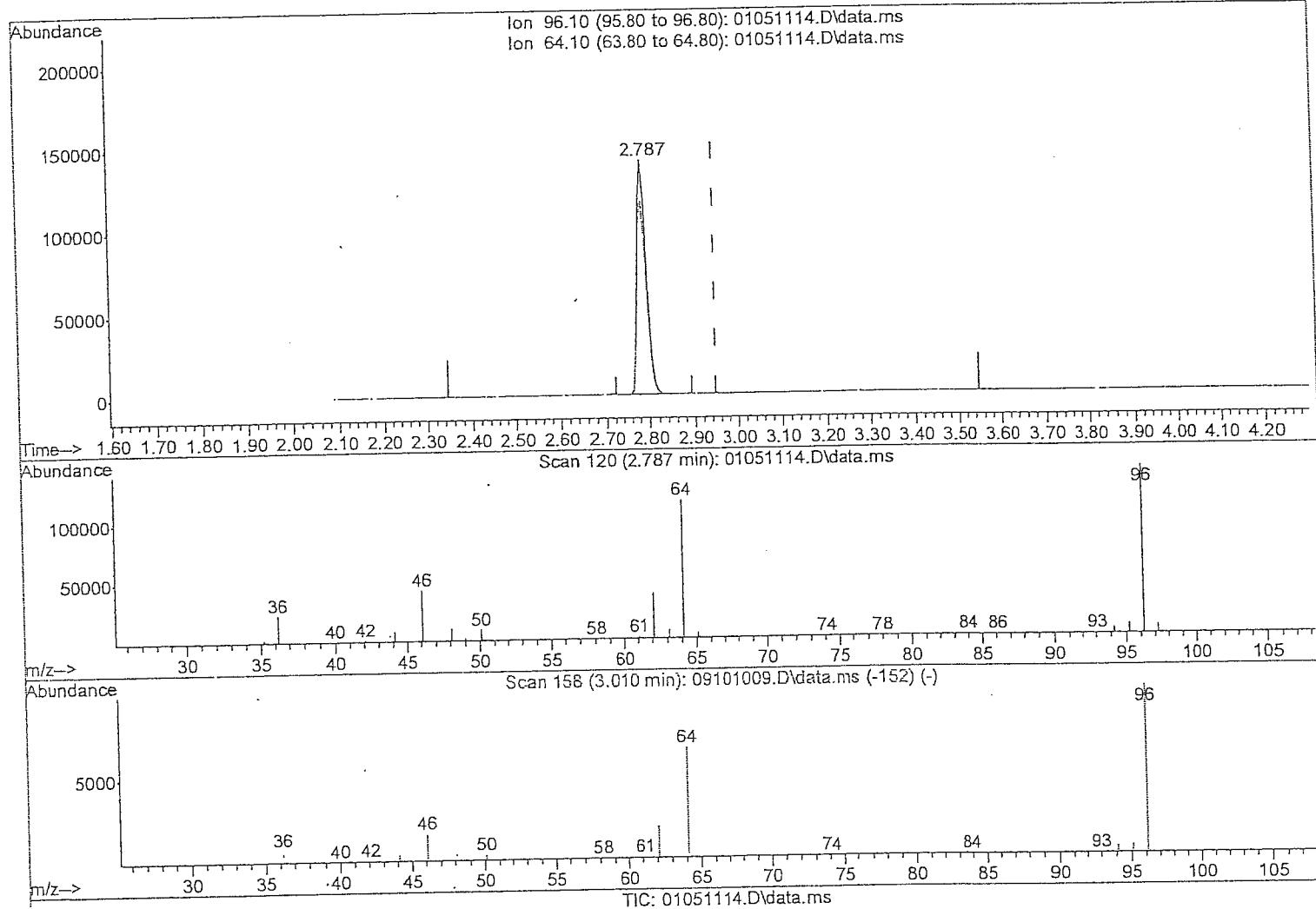
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270 (1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (l)

2.787min (-0.159) 20.00ug/mL m

response 203549

Ion	Exp%	Act%
96.10	100	100
64.10	83.80	83.74
0.00	0.00	0.00
0.00	0.00	0.00

220 of 285

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

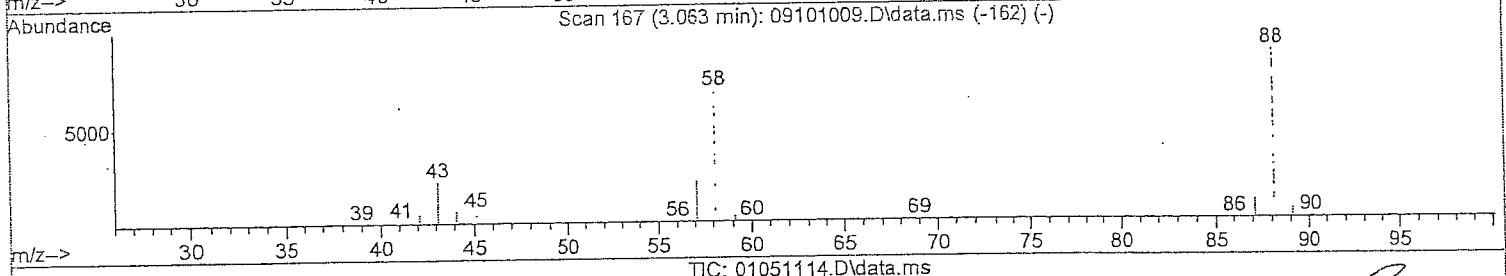
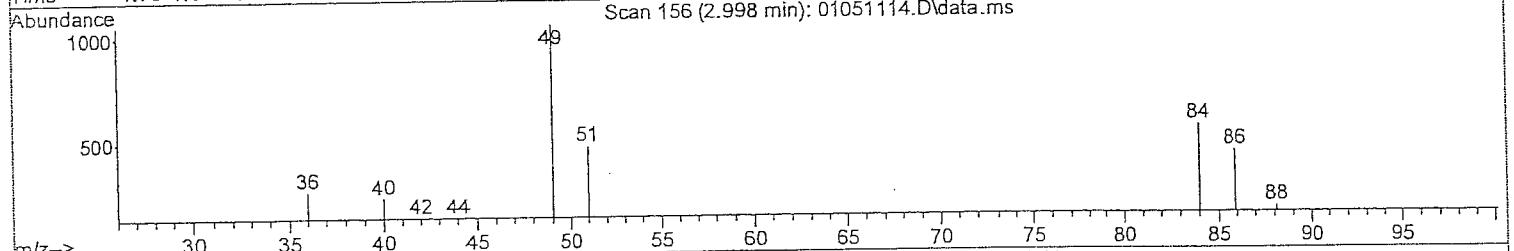
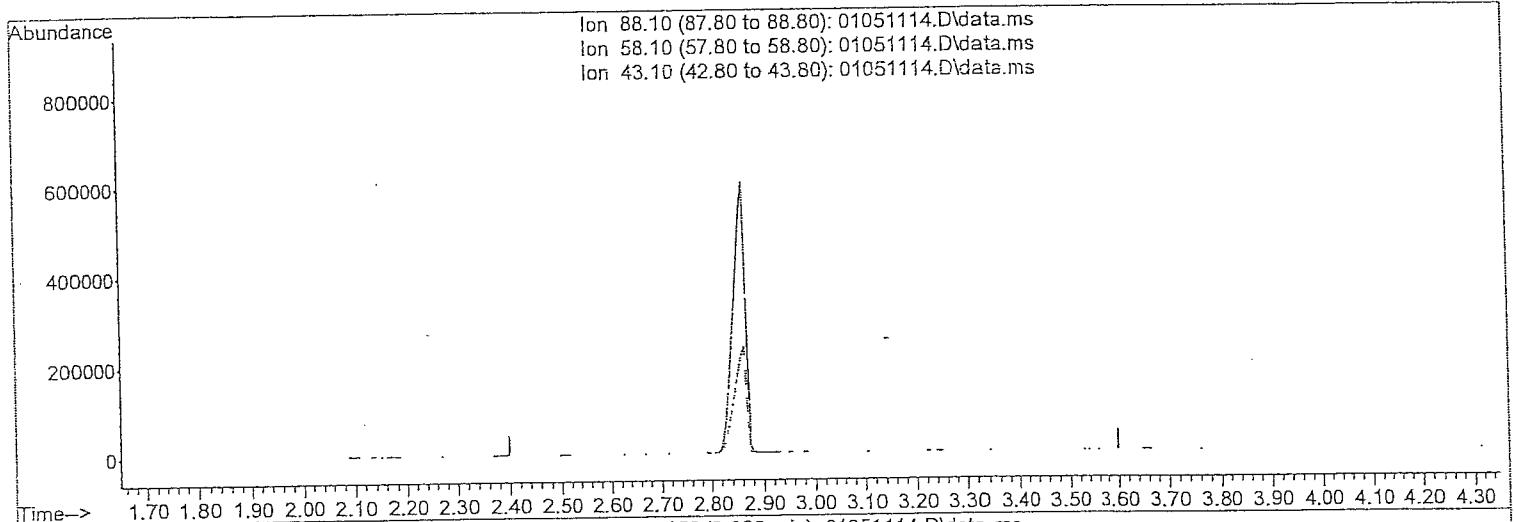
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.998min (-2.998) 0.00ug/mL

response 0

Ion	Exp%	Act%
88.10	100	0.00
58.10	97.70	0.00#
43.10	38.10	0.00#
0.00	0.00	0.00

BD

ca 1.5 ml

221 of 285

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

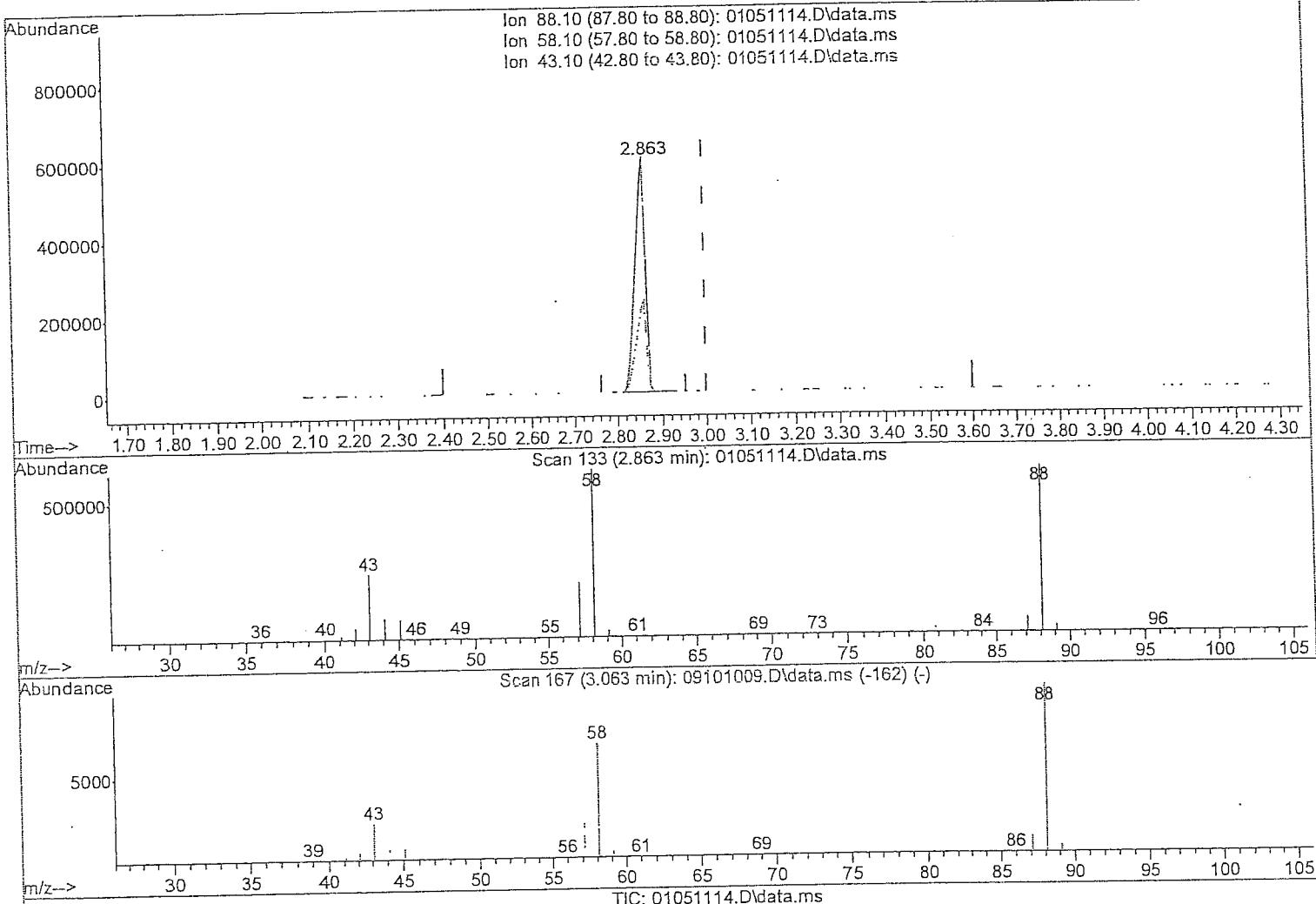
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.863min (-0.135) 93.33ug/mL m

response 957052

Ion	Exp%	Act%
88.10	100	100
58.10	97.70	100.08
43.10	38.10	38.93
0.00	0.00	0.00

222 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 0105115.D

Acq On : 5 Jan 2011 1:33 pm

Operator : CL

Sample : QCS10ug/mL PU00068

Misc : 1,4-DIOXANE

ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 05 13:43:34 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.946	96	322333	20.00	ug/mL	-0.03
3) 1,4-Dichlorobenzene-d4	6.086	152	233788	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	43	0.00	ug/mL	0.00
Target Compounds						
2) 1,4-Dioxane	2.998	88	165372	10.08	ug/mL	98
4) 1,4-Dichlorobenzene	6.081	146	386	0.01	ug/mL#	1

(#= qualifier out of range (m)= manual integration (+)= signals summed

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051115.D

Acq On : 5 Jan 2011 1:33 pm

Operator : CL

Sample : QCS10ug/mL PU00068

Misc : 1,4-DIOXANE

ALS Vial : 15 Sample Multiplier: 1

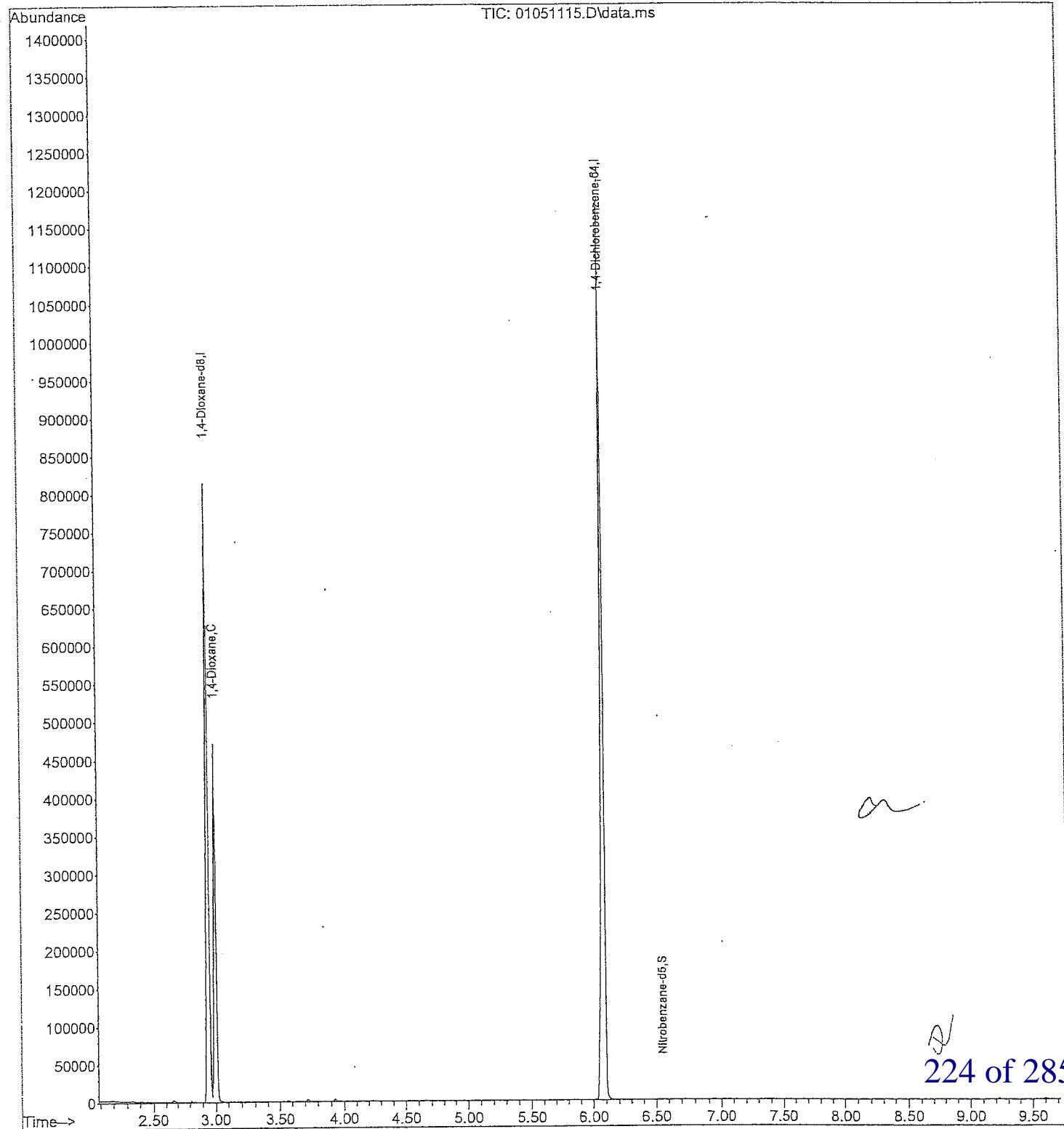
Quant Time: Jan 05 13:43:34 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL DATA

METHOD: EPA 8270C

DATE: 03/18/11

WORK ORDER: PUC1004-01

**Attachment 9**  
**ANALYTICAL DATA REVIEW CHECKLIST**

**SOP PE-SVD-014 R.1**  
**1, 4-Dioxane by Modified EPA 8270C**

Analyst: C. Laurie	Batch ID# uC 0614	Date Analyzed: 3/18/11		
Description		Yes	No	NA <sup>1</sup>
1. Tune	8:54 AM 3/18/11			
- DFTPP (50 ng) meets method criteria?		/		
- Tailing – Benzidine (Base/Neutrals) ≤ 3.0?		/		
- All samples analyzed <12 hours from time of Tune?		/		
2. Calibration Curve (minimum of 5 levels)		/		
- SPCC N-Nitroso-propylamine meets min. RF 0.05?		/		
- CCC 1,4-Dichlorobenzene ≤30%		/		
- All compounds RSD ≤20% or linear/quadratic $r^2 \geq 0.99$		/		
- QCS recovered ± 30%		/		
- Date of Initial Calibration: 01/05/11D Instrument: GCMS 14				
3. Retention Times Updated?		/		
4. CCVs all analytes recovered within 20% (includes CCC 1, 4-Dichlorobenzene)?		/		
- SPCC N-Nitroso-propylamine meets min. RF 0.05?		/		
- Internal Standard RT ± 0.5 min. from 10ppb std. in ICAL?		/		
- Internal Standard Areas -50% to 200% of 10ppb std. in ICAL?		/		
- Analyte RRTs ± 0.06 from 50ppb std. in ICAL?		/		
5. Method Blank extracted with batch?				
- All target analytes recovered <RL?				
6. LCS/LCSD extracted with batch?				
- Recoveries within Laboratory Limits?				
- RPDs ≤ Laboratory Limits?				
7. MS/MSD extracted with batch?				
- Recoveries within Historical Limits?				
- RPDs Laboratory Limits?				
8. Samples extracted within 7 days from collection?				
- Samples analyzed within 40 days from extraction?				
- Internal Standard RT ± 0.5 min. from CCV?				
- Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?				
- Maximum of 20 samples in batch?				
- Surrogate recoveries within Historical Limits?				
Comments: IS Element ID(s): PTOLO37 (1,4-DCB-d4)				
Samples loaded by CL; DE by JDR and CL				

Review Signatures:	Analyst: <i>Josephine Miller</i>	Date: 03/22/11
	Reviewer: <i>Amy L. Cawriss</i>	Date: 3/22/11

<sup>1</sup> NA: Not Applicable

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\Ymsdchem\1\GCMS14\sequence\031811.S

Comment:

Operator: CL/AC

Data Path: D:\MSDCHEM\1\GCMS14\DATA\031811\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

(X) Full Method

On A Barcode Mismatch

( ) Reprocessing Only

(X) Inject Anyway

( ) Don't Inject

Line	Sample	Sample Name/Misc Info
1)	Sample	1 03181101 DB5MS14 DCM
2)	Sample	2 03181102 DB5MS14 DCM
3)	Sample	3 03181103 DB5MS14 DCM
4)	Sample	4 03181104 DB5MS14 25ng tune std pu01447
5)	Sample	5 03181105 DIOXANE DCM
6)	Sample	6 03181106 DIOXANE 10ug/mL 14-diox-01520
7)	Sample	7 03181107 DIOXANE DCM
8)	Sample	8 03181108 DIOXANE 11C0614-BLK1
9)	Sample	9 03181109 DIOXANE 11C0614-BS1
10)	Sample	10 03181110 DIOXANE 11C0614-BSD1
11)	Sample	11 03181111 DIOXANE PUC0982-02
12)	Sample	12 03181112 DIOXANE 11C0614-MS1
13)	Sample	13 03181113 DIOXANE 11C0614-MSD1
14)	Sample	14 03181114 DIOXANE PUC0911-02
15)	Sample	15 03181115 DIOXANE 11C0614-MS2
16)	Sample	16 03181116 DIOXANE 11C0614-MSD2
17)	Sample	17 03181117 DIOXANE PUC0911-01
18)	Sample	18 03181118 DIOXANE PUC0911-03
19)	Sample	19 03181119 DIOXANE PUC0911-04
20)	Sample	20 03181120 DIOXANE PUC0911-05
21)	Sample	21 03181121 DIOXANE PUC0982-01
22)	Sample	22 03181122 DIOXANE PUC1004-01
23)	Sample	1 03181123 DB5MS14 25ng tune std pu01447
24)	Sample	2 03181124 DIOXANE DCM
25)	Sample	3 03181125 DIOXANE 10ug/mL 14-diox-01520
26)	Sample	4 03181126 DIOXANE 11C0675-BLK1
27)	Sample	5 03181127 DIOXANE 11C0675-BS1
28)	Sample	6 03181128 DIOXANE 11C0675-BSD1
29)	Sample	7 03181129 DIOXANE PUC0982-03
30)	Sample	8 03181130 DIOXANE PUC0982-04
31)	Sample	9 03181131 DIOXANE PUC1102-01
32)	Sample	10 03181132 DIOXANE PUC0731-02RE1
33)	Sample	11 03181133 DIOXANE PUC1113-01
34)	Sample	12 03181134 DIOXANE PUC1114-01
35)	Sample	13 03181135 DIOXANE PUC1114-02
36)	Sample	14 03181136 DIOXANE PUC1114-03
37)	Sample	15 03181137 DIOXANE PUC1114-04
38)	Sample	16 03181138 DIOXANE PUC1197-01
39)	Sample	17 03181139 DIOXANE PUC1197-02
40)	Sample	18 03181140 DIOXANE PUC1197-03
41)	Sample	19 03181141 DIOXANE PUC1197-04
42)	Sample	20 03181142 DIOXANE PUC1197-05

Sequence Reviewed By:

a

Date: 3-20-11

227 of 285

Date Analyzed: 3/20/11

Analyst: a

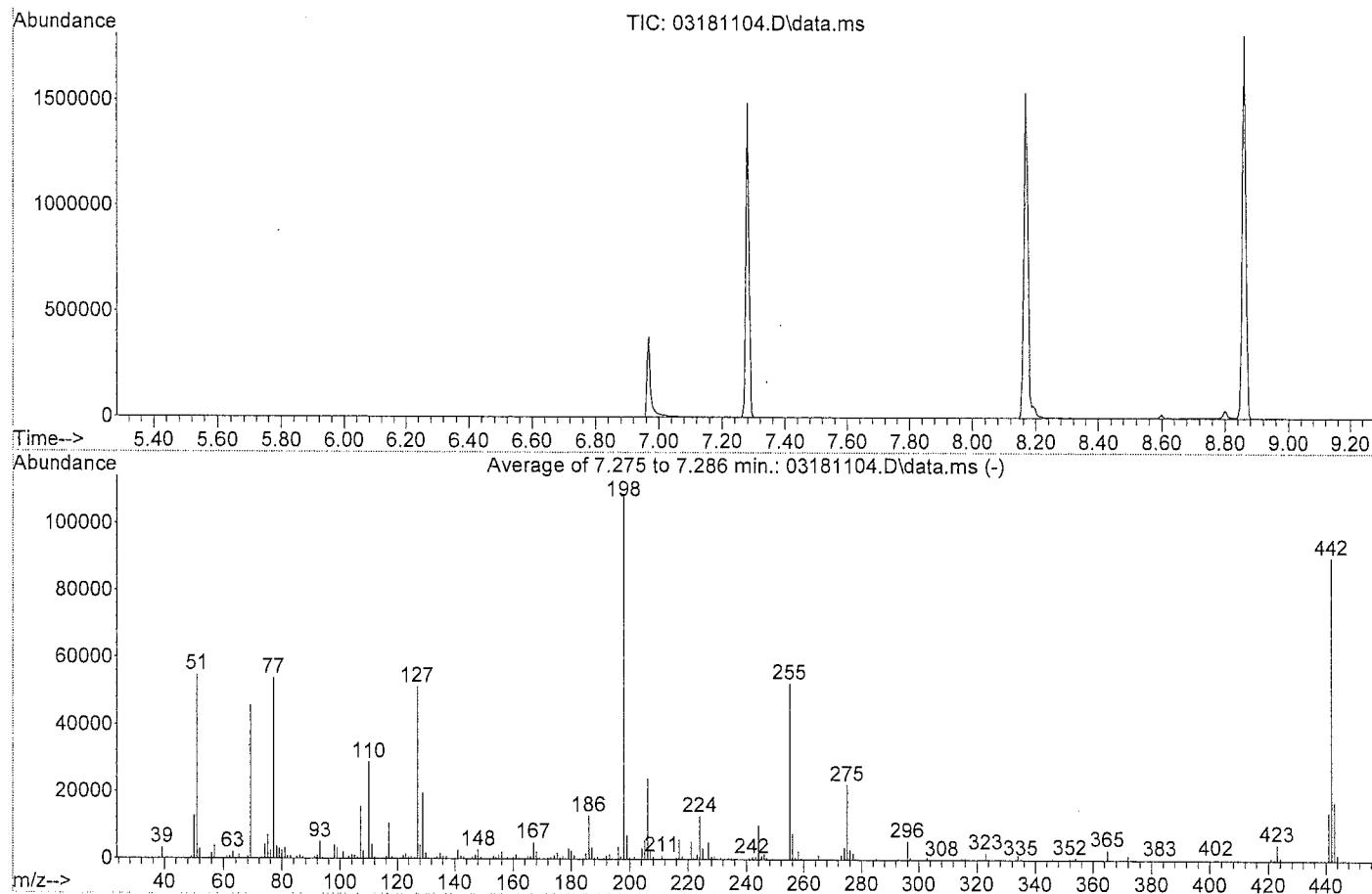
Date Run: 3-18-

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
 Data File : 03181104.D  
 Acq On : 18 Mar 2011 8:54 am  
 Operator : CL/AC  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Thu Feb 17 11:44:41 2011



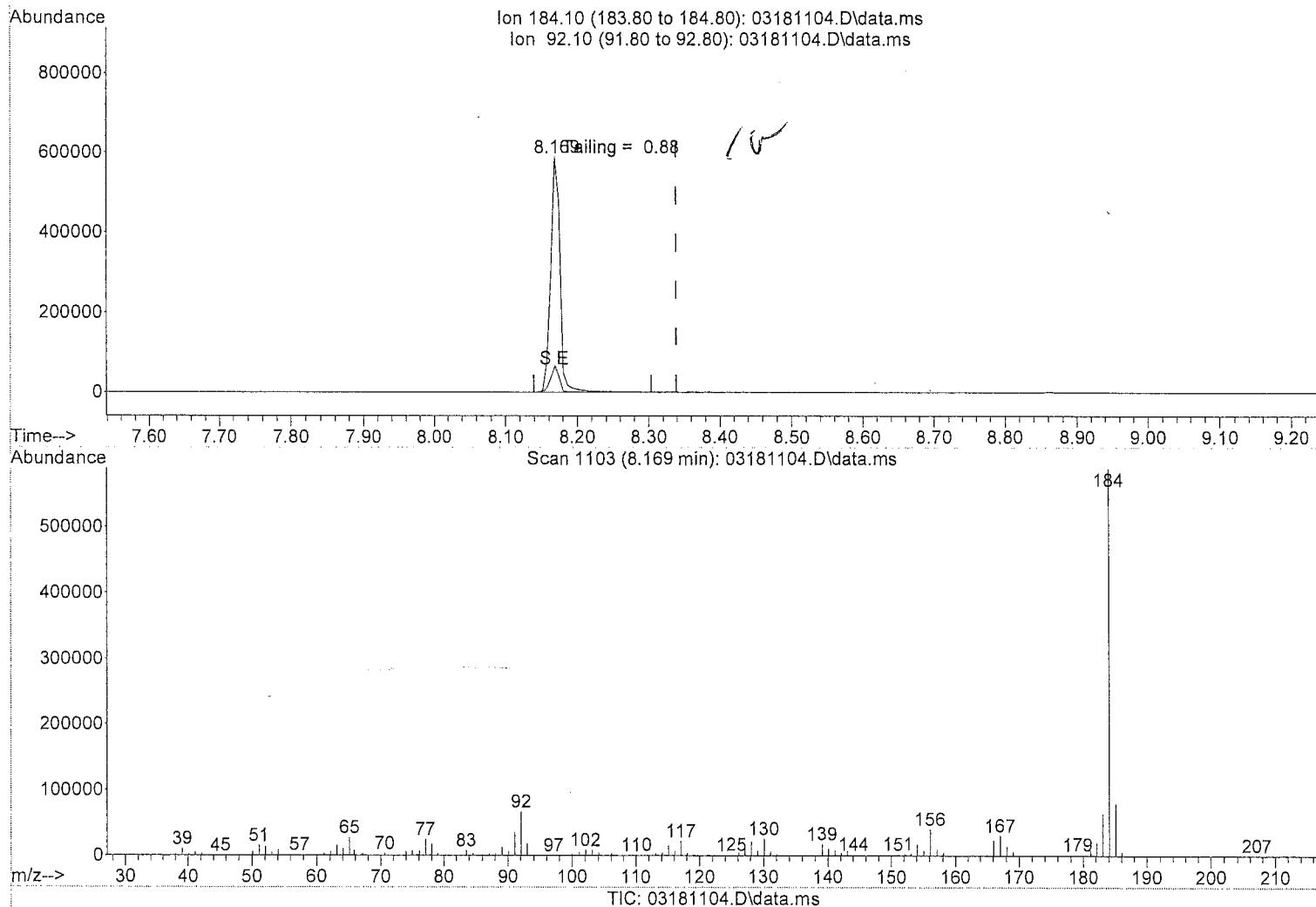
AutoFind: Scans 951, 952, 953; Background Corrected with Scan 946

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	54730	PASS
68	69	0.00	2	1.4	631	PASS
69	198	0.00	100	42.1	45729	PASS
70	69	0.00	2	0.4	167	PASS
127	198	40	60	47.3	51306	PASS
197	198	0.00	1	0.7	791	PASS
198	198	100	100	100.0	108562	PASS
199	198	5	9	6.6	7133	PASS
275	198	10	30	20.4	22198	PASS
365	198	1	100	2.7	2898	PASS
441	443	0.01	100	81.1	14173	PASS
442	198	40	100	83.1	90170	PASS
443	442	17	23	19.4	17479	PASS

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181104.D  
 Acq On : 18 Mar 2011 8:54 am  
 Operator : CL/AC  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 18 10:14:14 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Quant Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 QLast Update : Thu Feb 17 11:44:41 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.169min (-0.170) 7.02

response 551507

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.42
0.00	0.00	0.00
0.00	0.00	0.00

229 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181106.D  
 Acq On : 18 Mar 2011 9:46 am  
 Operator : CL/AC  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

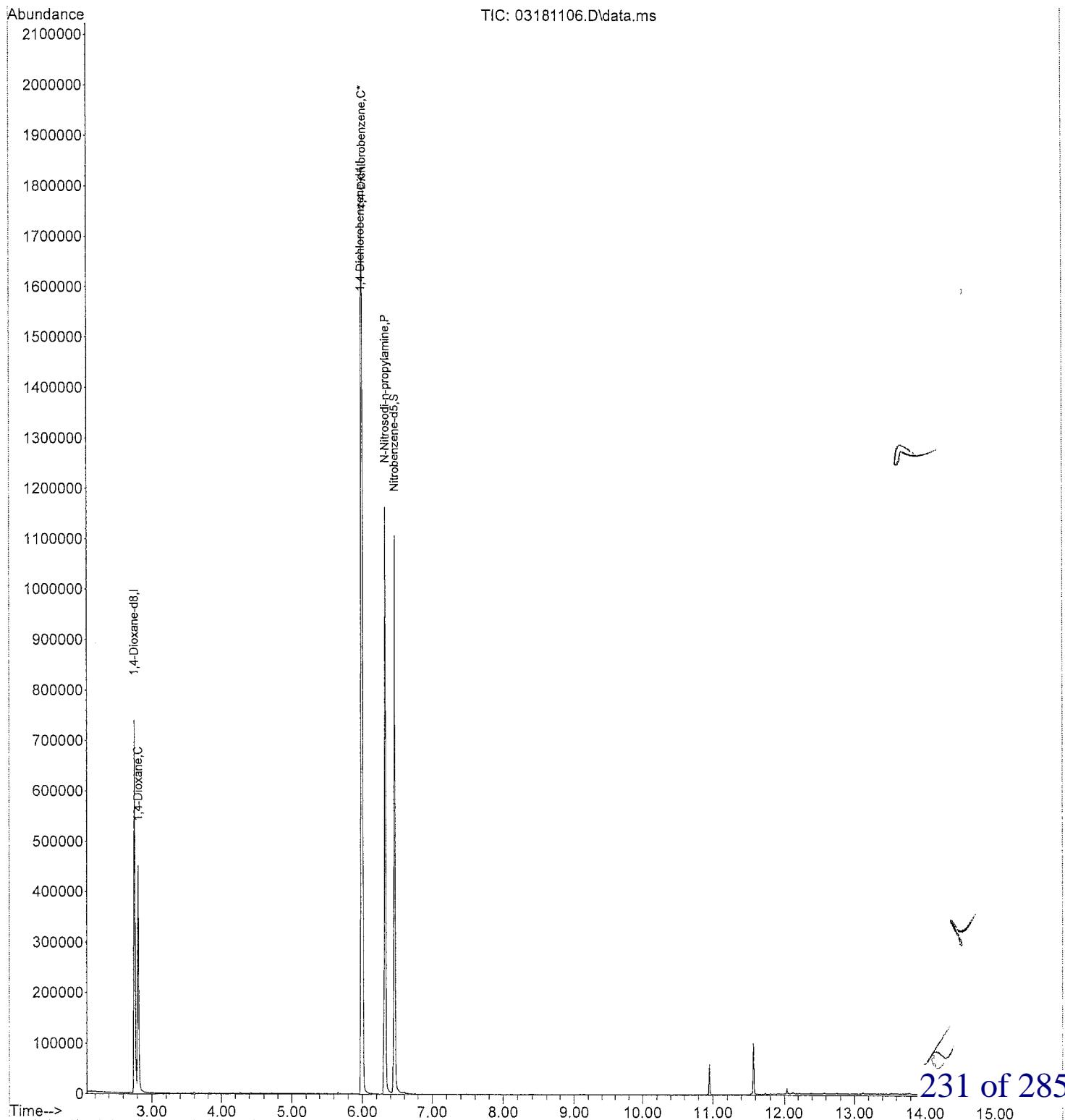
Quant Time: Mar 18 10:14:57 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 763	96	274727	20.00	ug/mL	0.02
3) 1, 4-Dichlorobenzene-d4	5. 993	152	236564	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	390793	9.22	ug/mL	-0.02
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 816	88	146409	10.47	ug/mL	96
4) 1, 4-Dichlorobenzene	6. 010	146	406505	10.45	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 328	70	275698	9.75	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : D:\msdchem\1\GCMS14\DATA\031811\03181106.D  
Data File : 03181106.D  
Acq On : 18 Mar 2011 9:46 am  
Operator : CL/AC  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 18 10:14:57 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14 / MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.746	1.000	A	1	A	B
2 C	1,4-Dioxane	88	2.793	1.017	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.010	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.028	1.003	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.345	1.056	A	1	A	B
6 S	Nitrobenzene-d5	82	6.481	1.078	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

10511D.M Fri Mar 18 10:15:29 2011

3/18/11

3/22/11

232 of 285

## Evaluate Continuing Calibration Report

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181106.D  
 Acq On : 18 Mar 2011 9:46 am  
 Operator : CL/AC  
 Sample : 10ug/mL 14-diox-01520  
 Misc : CCV  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 18 10:14:57 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 40% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 400%

	Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
1 I	1, 4-Dioxane-d8	1.000	1.000	0.0	84	0.02
2 C	1, 4-Dioxane	1.018	1.066	-4.7	85	0.02
3 I	1, 4-Dichlorobenzene-d4	1.000	1.000	0.0	97	-0.02
4 C*	1, 4-Dichlorobenzene	1.644	1.718	-4.5	100	-0.02
5 P	N-Nitrosodi-n-propylamine	1.195	1.165	2.5	90	-0.02
6 S	Nitrobenzene-d5	1.792	1.652	7.8	86	-0.02

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 9:46  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063-

01051110.D

D:\msdchem\1\GCMS14\DATA\010511\  
 mid-RT

NAME	RT	✓CCV	RRT	010511.M	AGREE	AGREE	PASS/FAIL
		Value		-0.06	0.06	(Target/IS)	
IS 1,4-Dioxane-d8	2.763 ✓						
1,4-Dioxane	2.816 ✓	1.0192	1.0178 ✓	0.9578 ✓	1.0778	<-PASS	
IS 1,4-Dichlorobenzene-d4	5.993 ✓						
1,4-Dichlorobenzene	6.010 ✓	1.0029	1.0019 ✓	0.9419 ✓	1.0619	<-PASS	
N-Nitrosodi-n-propylamine	6.328 ✓	1.0559	1.0541 ✓	0.9941 ✓	1.1141	<-PASS	
Nitrobenzene-d5	6.463 ✓	1.0785	1.0763 ✓	1.0163 ✓	1.1363	<-PASS	

3/18/11

3/22/11

W.B.

234 of 285

3/18/2011 10:16 AM

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 9:46  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 DIOX010511.M

	CCV RESPONSE	ICAL RESPONSE	0.5X	PASS/FAIL
Internal Standard				
1,4-Dichlorobenzene-d4	236564 ✓	243008 ✓	121504	486016 <-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min
1,4-Dichlorobenzene-d4	5.99 ✓	6.09 ✓	5.59	6.59 <-PASS

03/18/11

3/21/11

5/21

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181106.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 9:46  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03181106.D ✓  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	236564	236564	118282	473128	<PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<PASS

Daily update  
 3-18-11

3/22/11

B221

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\  
Method File : 031811A\_D8.M  
Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
Last Update : Mon Mar 21 15:22:11 2011  
Response Via : Continuing Calibration

Total Cpnds : 2

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I 1,4-Dichlorobenzene-d4	152	5.993	1.000	A	0	A	B
2	I 1,4-Dioxane-d8	96	2.763	0.461	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

031811A\_D8.M Mon Mar 21 15:22:23 2011

03/21/11

Mar 21/11

237 of 285

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031811A\_D8.M

Title : GCMS14/1, 4-DIOXANE-D8/SURROGATE ONLY

Last Update : Mon Mar 21 15:22:11 2011

Response Via : Continuing Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	20	10	D:\msdchem\1\GCMS14\DATA\031811\03181106.D
2	CC	20	10	D:\msdchem\1\GCMS14\DATA\031811\03181106.D

*03/21/11*

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Mar 21 15:22 2011	Mar 21 15:21 2011	18 Mar 2011 9:46 am
2	CC	Mar 21 15:22 2011	Mar 21 15:21 2011	18 Mar 2011 9:46 am

031811A\_D8.M Mon Mar 21 15:22:32 2011

*03/21/11**238 of 285*

## Response Factor Report GCMS14

Method Path : D:\Ymsdchem\Y1\GCMS14\METHODS\14DIOXD8\

Method File : 031811A\_D8.M

Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 15:22:11 2011

Response Via : Continuing Calibration

## Calibration Files

1 =03181106.D

Compound	1	Avg	%RSD
----------	---	-----	------

1) I	1, 4-Dichlorobenzen...	-----	ISTD-----
2)	1, 4-Dioxane-d8	0.581	0.00

(#= Out of Range

*an. 21. 11**3/22/11**B24***239 of 285**

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
Data File : 03181106.D  
Acq On : 18 Mar 2011 9:46 am  
Operator : CL/AC  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 15:22:44 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\Y03181106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dichlorobenzene-d4	5. 993	152	236564	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 763	96	274727	20. 00	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11

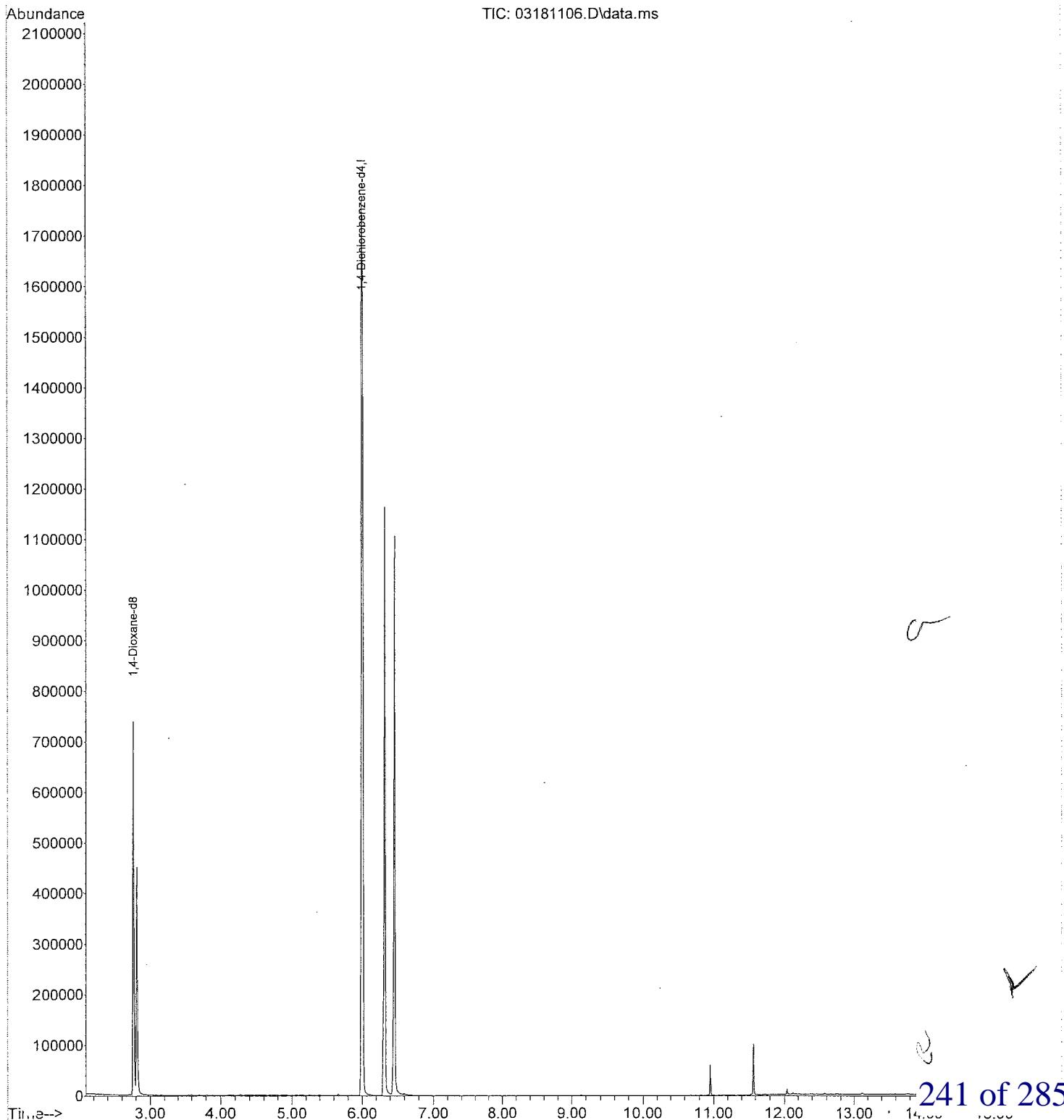
✓

3/21/11

240 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
Data File : 03181106.D  
Acq On : 18 Mar 2011 9:46 am  
Operator : CL/AC  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 15:22:44 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D



Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\  
 Data File : 03181108.D  
 Acq On : 18 Mar 2011 11:43 am  
 Operator : CL/AC  
 Sample : 11C0614-BLK1  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

2/1/11  
G9

Quant Time: Mar 18 16:52:21 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\Y14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 775	96	188090	20. 00	ug/mL	0. 03
3) 1, 4-Dichlorobenzene-d4	5. 992	152	222055	10. 00	ug/mL	-0. 02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	645506	16. 22	ug/mL	-0. 02
Target Compounds					Value	
2) 1, 4-Dioxane	2. 845	88	117	0. 01	ug/mL#	60
4) 1, 4-Dichlorobenzene	6. 004	146	276	0. 01	ug/mL#	W 1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

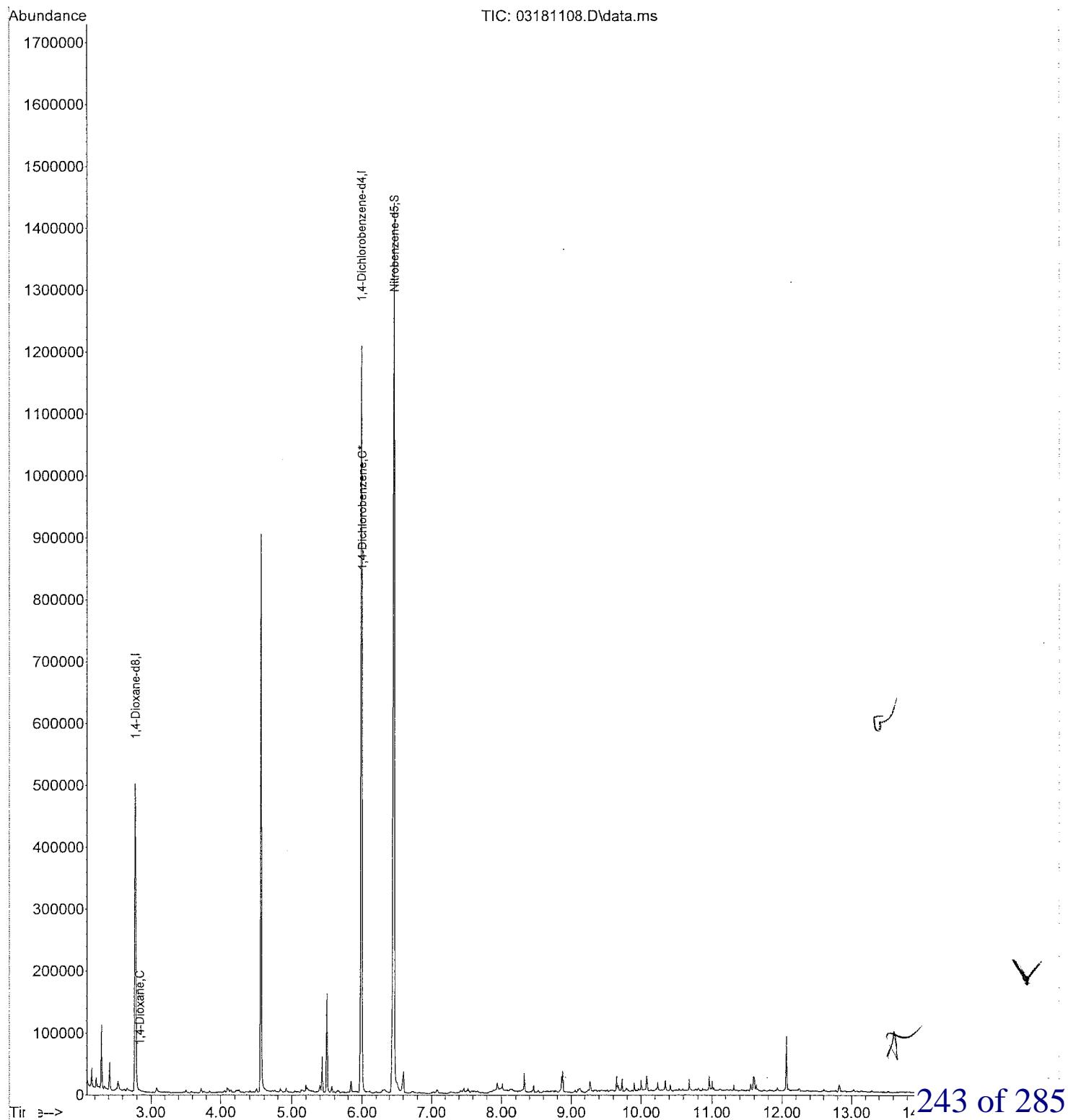
3/22/11

Bell

242 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
Data File : 03181108.D  
Acq On : 18 Mar 2011 11:43 am  
Operator : CL/AC  
Sample : 11C0614-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 18 16:52:21 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0614-BLK1  
 Data File Name 03181108.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 11:43  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	222055	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS



✓  
 3/18/2011

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181108.D  
 Acq On : 18 Mar 2011 11:43 am  
 Operator : CL/AC  
 Sample : 11C0614-BLK1  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 15:23:17 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 15:22:11 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

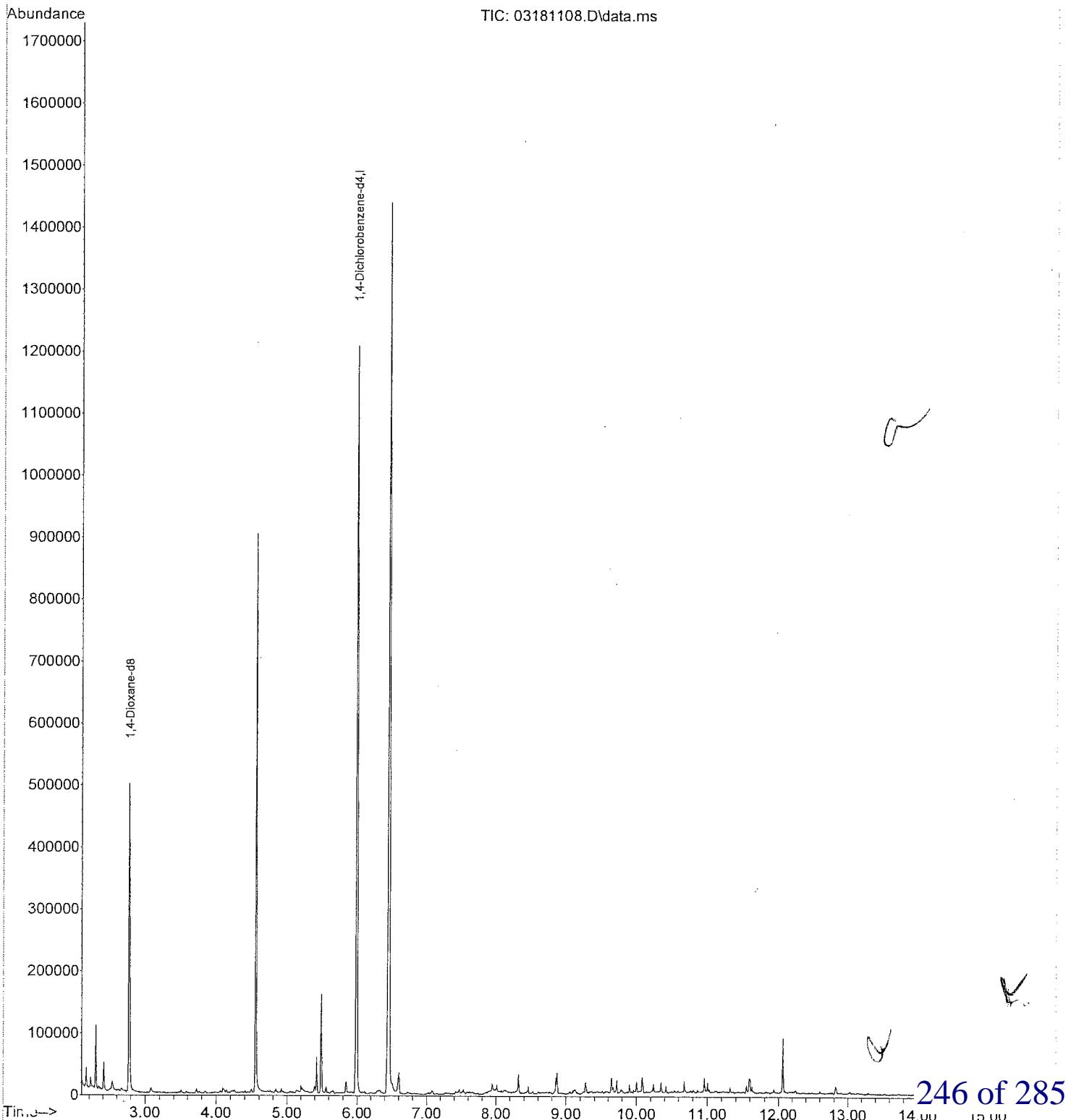
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	222055	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.775	96	188090	14.59	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Bell 2/28/11  
245 of 285

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
Data File : 03181108.D  
Acq On : 18 Mar 2011 11:43 am  
Operator : CL/AC  
Sample : 11C0614-BLK1  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 15:23:17 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\031811\Y03181106.D



Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181109.D  
 Acq On : 18 Mar 2011 12:09 pm  
 Operator : CL/AC  
 Sample : 11C0614-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 18 16:52:27 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

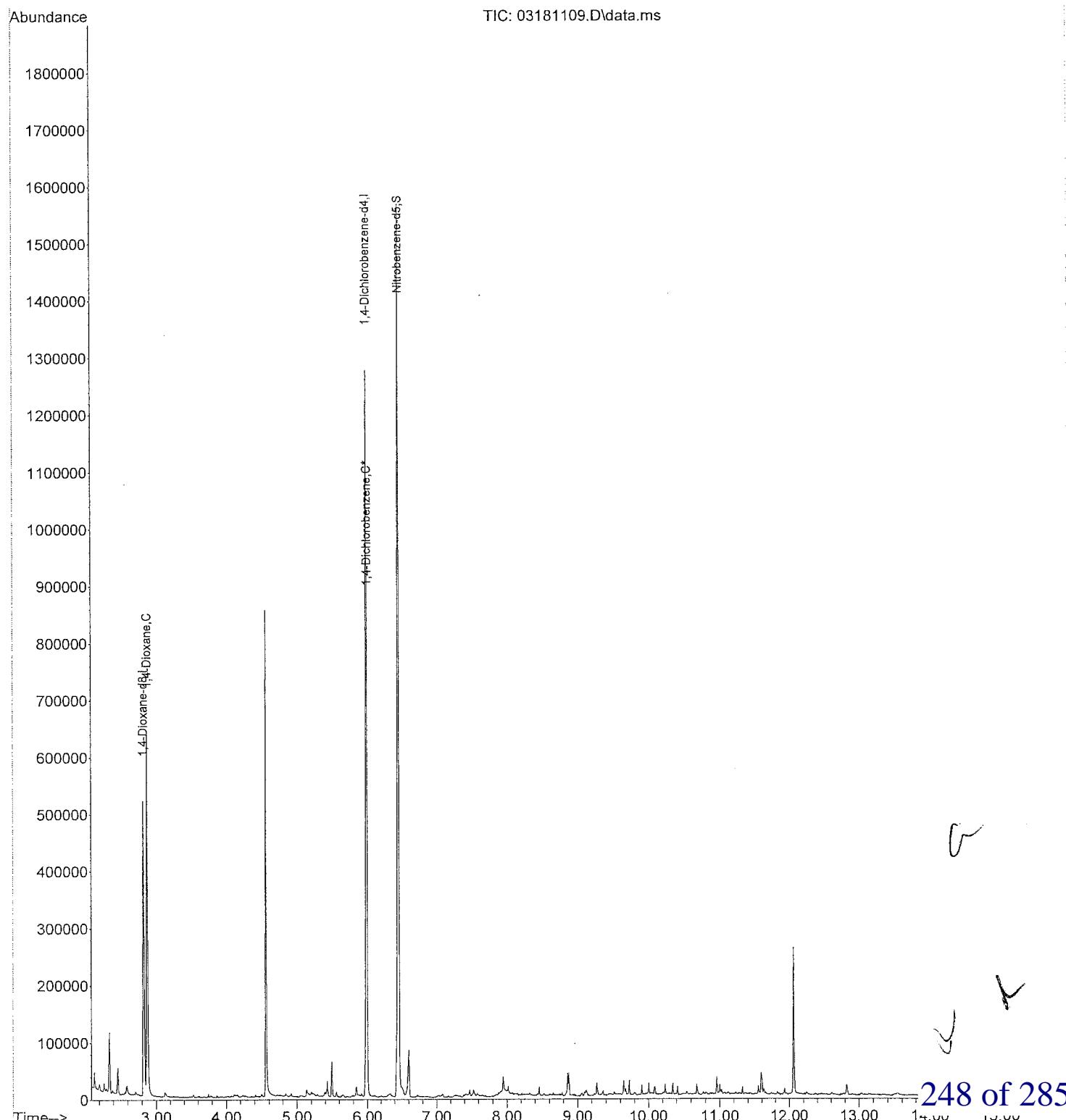
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 822	96	195522	20.00	ug/mL	0.08
3) 1, 4-Dichlorobenzene-d4	5. 992	152	228922	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	679169	16.56	ug/mL	-0.02
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 875	88	208290	20.93	ug/mL	97
4) 1, 4-Dichlorobenzene	6. 004	146	646	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/22/11  
2/22/11  
247 of 285

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
Data File : 03181109.D  
Acq On : 18 Mar 2011 12:09 pm  
Operator : CL/AC  
Sample : 11C0614-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 18 16:52:27 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0614-BS1  
 Data File Name 03181109.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 12:09  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	228922 ✓	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

✓ 3/20/11

Q

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181109.D  
 Acq On : 18 Mar 2011 12:09 pm  
 Operator : CL/AC  
 Sample : 11C0614-BS1  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

03181109.D

Quant Time: Mar 21 15:23:21 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 15:22:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

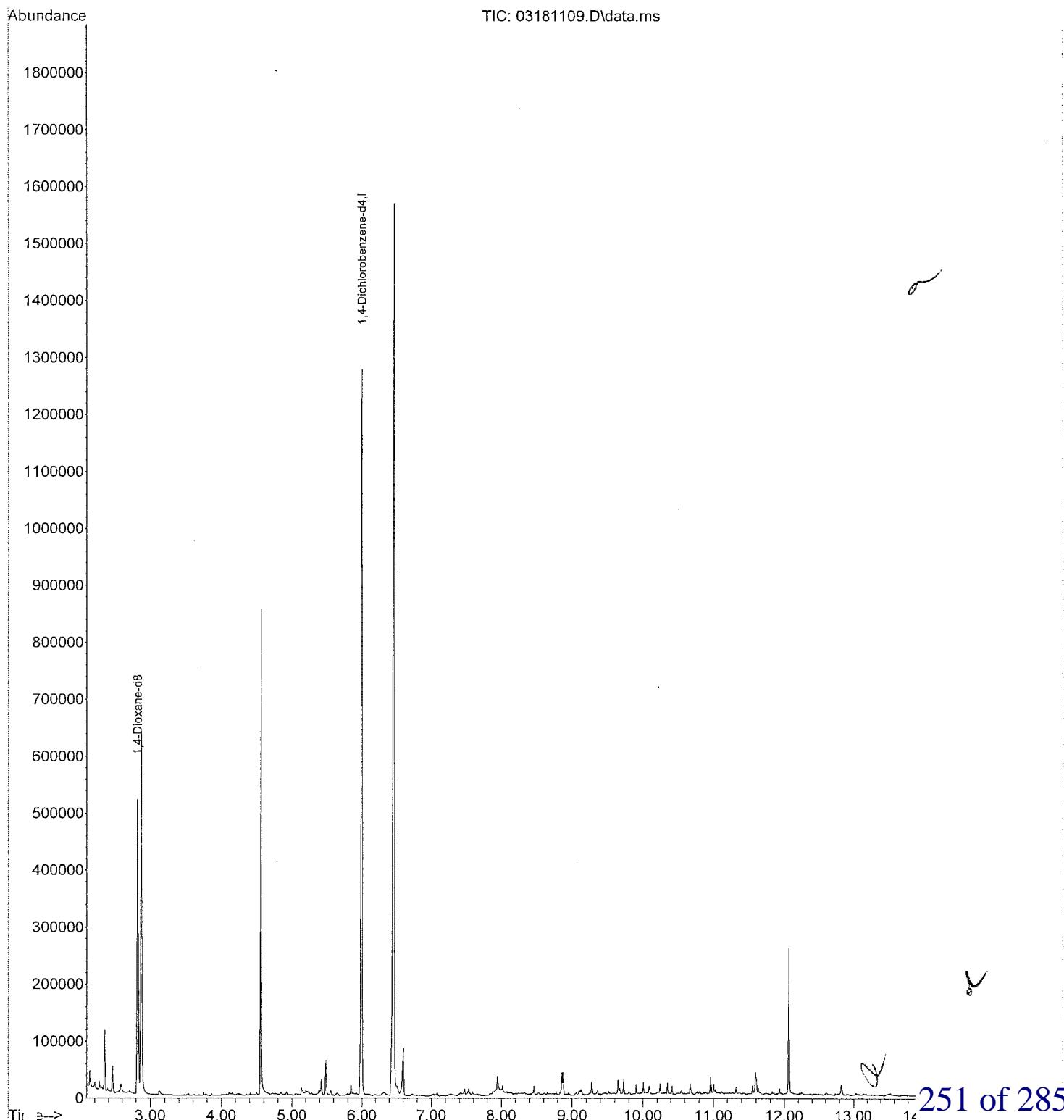
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	228922	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.822	96	195522	14.71	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

03181109.D  
250 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
Data File : 03181109.D  
Acq On : 18 Mar 2011 12:09 pm  
Operator : CL/AC  
Sample : 11C0614-BS1  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 21 15:23:21 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D



Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 0318110.D

Acq On : 18 Mar 2011 12:36 pm

Operator : CL/AC

Sample : 11C0614-BSD1

Misc :

ALS Vial : 10 Sample Multiplier: 1

✓  
G.M.

Quant Time: Mar 18 16:52:32 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 746	96	180745	20.00	ug/mL	0.00
3) 1, 4-Dichlorobenzene-d4	5. 992	152	204024	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	629517	17.22	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 804	88	192445	20.92	ug/mL	95
4) 1, 4-Dichlorobenzene	5. 998	146	583	0.02	ug/mL#	1
5) N-Nitrosodi-n-propylamine	6. 275	70	2781	0.11	ug/mL#	51

(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/24/11  
3/2/11  
252 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 0318110.D

Acq On : 18 Mar 2011 12:36 pm

Operator : CL/AC

Sample : 11C0614-BSD1

Misc :

ALS Vial : 10 Sample Multiplier: 1

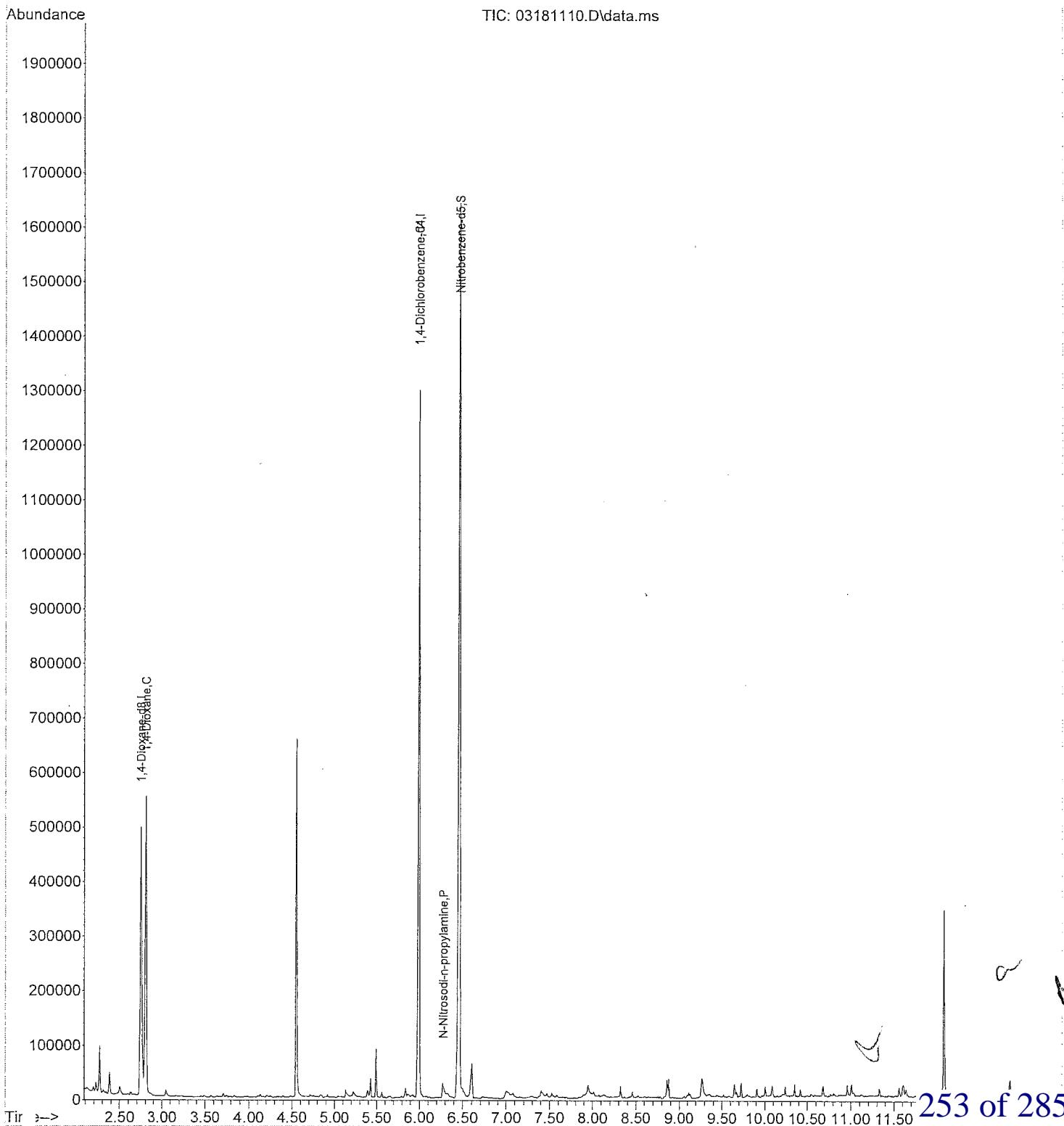
Quant Time: Mar 18 16:52:32 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

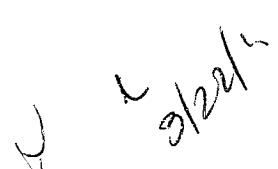
QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration



Sample Name 11C0614-BSD1  
 Data File Name 0318110.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 12:36  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	204024 ✓	236564	118282	473128	<-PASS
Internal Standard	RT ✓	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49	<-PASS

254 of 285

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181110.D  
 Acq On : 18 Mar 2011 12:36 pm  
 Operator : CL/AC  
 Sample : 11C0614-BSD1  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 15:23:25 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 15:22:11 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev(Min)
1) 1, 4-Dichlorobenzene-d4	5. 992	152	204024	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 746	96	180745	15. 26	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/22/11

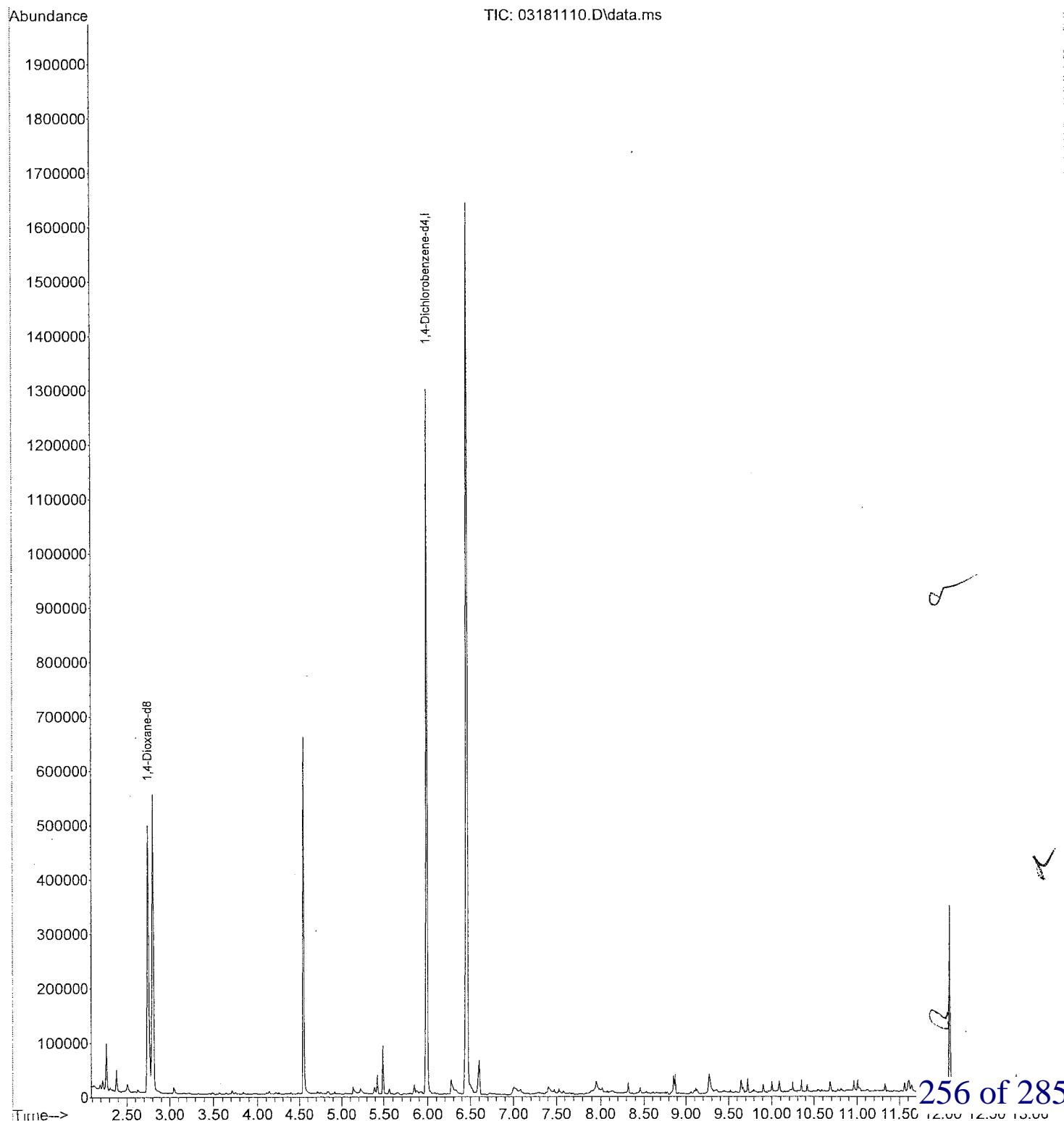
2/22/11

255 of 285

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811Y  
Data File : 03181110.D  
Acq On : 18 Mar 2011 12:36 pm  
Operator : CL/AC  
Sample : 11C0614-BSD1  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 15:23:25 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\031811\03181106.D



## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 03181111.D

Acq On : 18 Mar 2011 12:59 pm

Operator : CL/AC

Sample : PUC0982-02

Misc :

ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 18 16:52:37 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

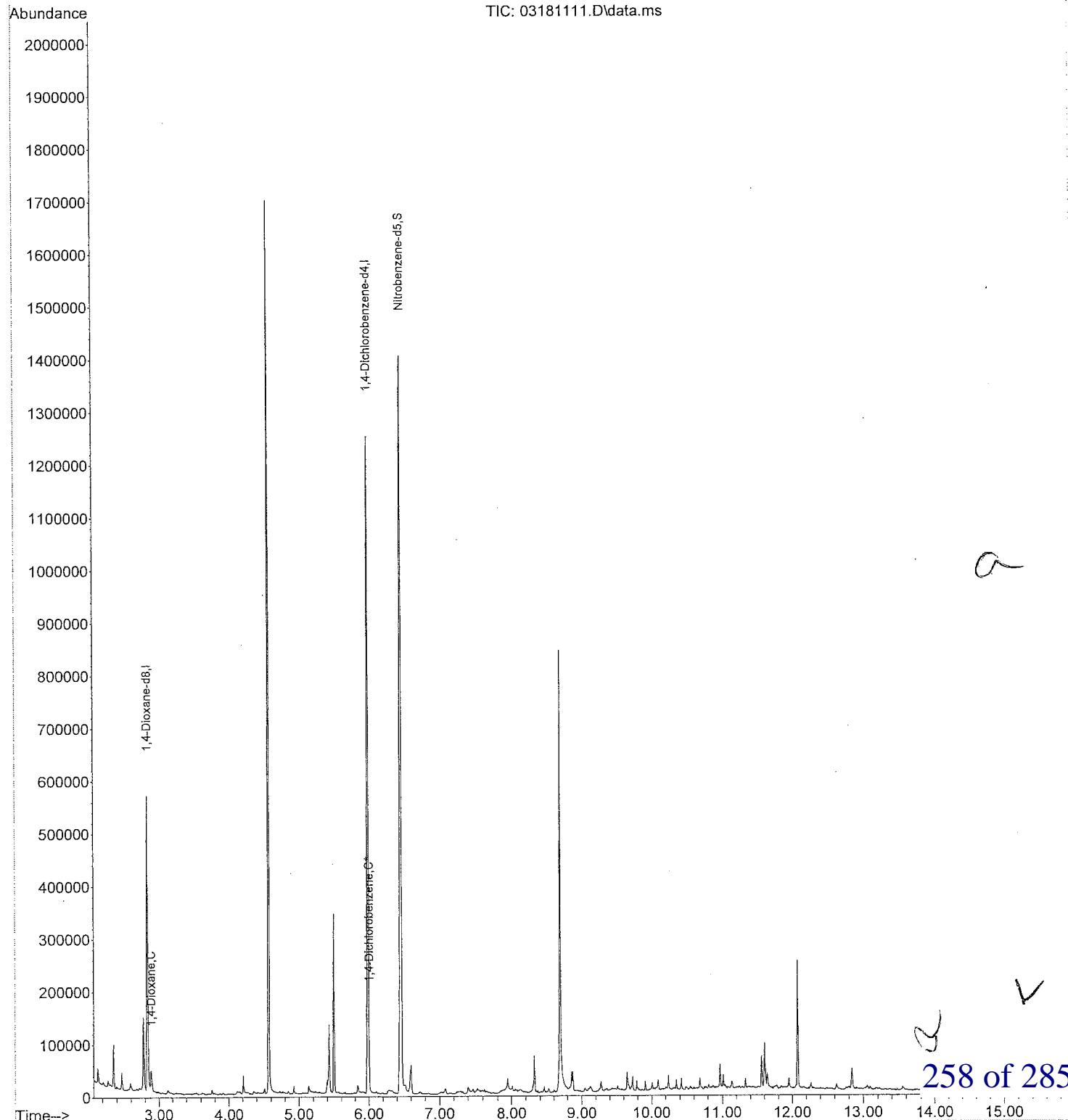
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 834	96	198964	20.00	ug/mL	0.09
3) 1, 4-Dichlorobenzene-d4	5. 992	152	223389	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	690175	17.24	ug/mL	-0.02
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 887	88	15552	1.54	ug/mL	91
4) 1, 4-Dichlorobenzene	6. 010	146	178	0.00	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
Data File : 03181111.D  
Acq On : 18 Mar 2011 12:59 pm  
Operator : CL/AC  
Sample : PUC0982-02  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

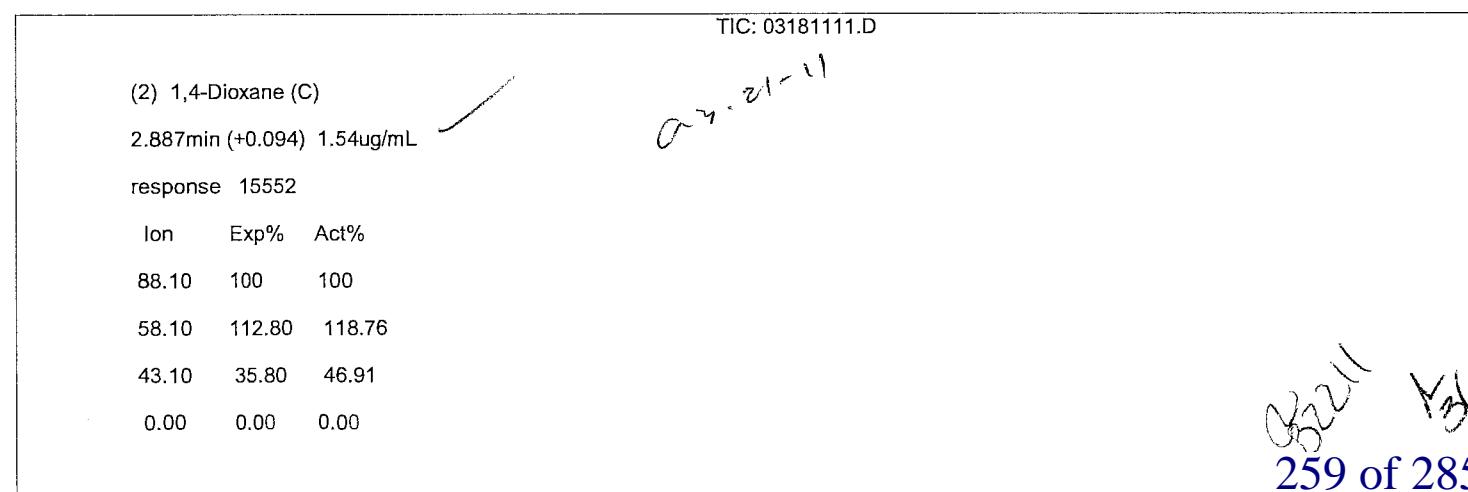
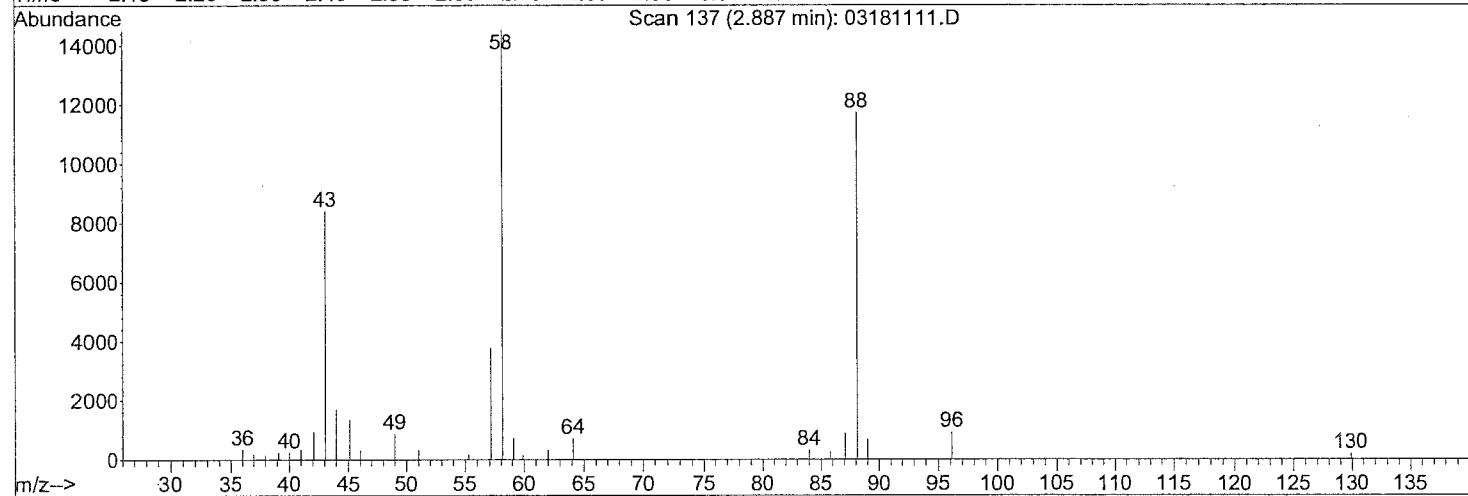
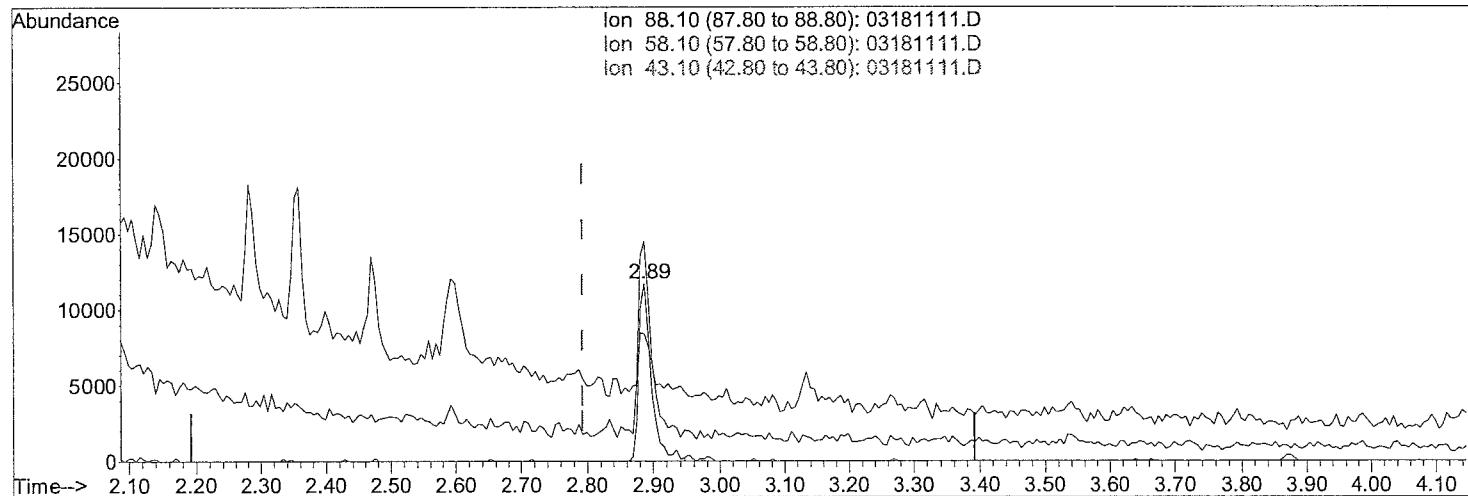
Quant Time: Mar 18 16:52:37 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181111.D  
 Acq On : 18 Mar 2011 12:59 pm  
 Operator : CL/AC  
 Sample : PUC0982-02  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 18 16:52:37 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



Sample Name PUC0982-02  
 Data File Name 03181111.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 12:59  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	223389	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

3/18/11  
OK

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 0318111.D  
 Acq On : 18 Mar 2011 12:59 pm  
 Operator : CL/AC  
 Sample : PUC0982-02  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 15:23:29 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 15:22:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 992	152	223389	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 834	96	199060	15. 35	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

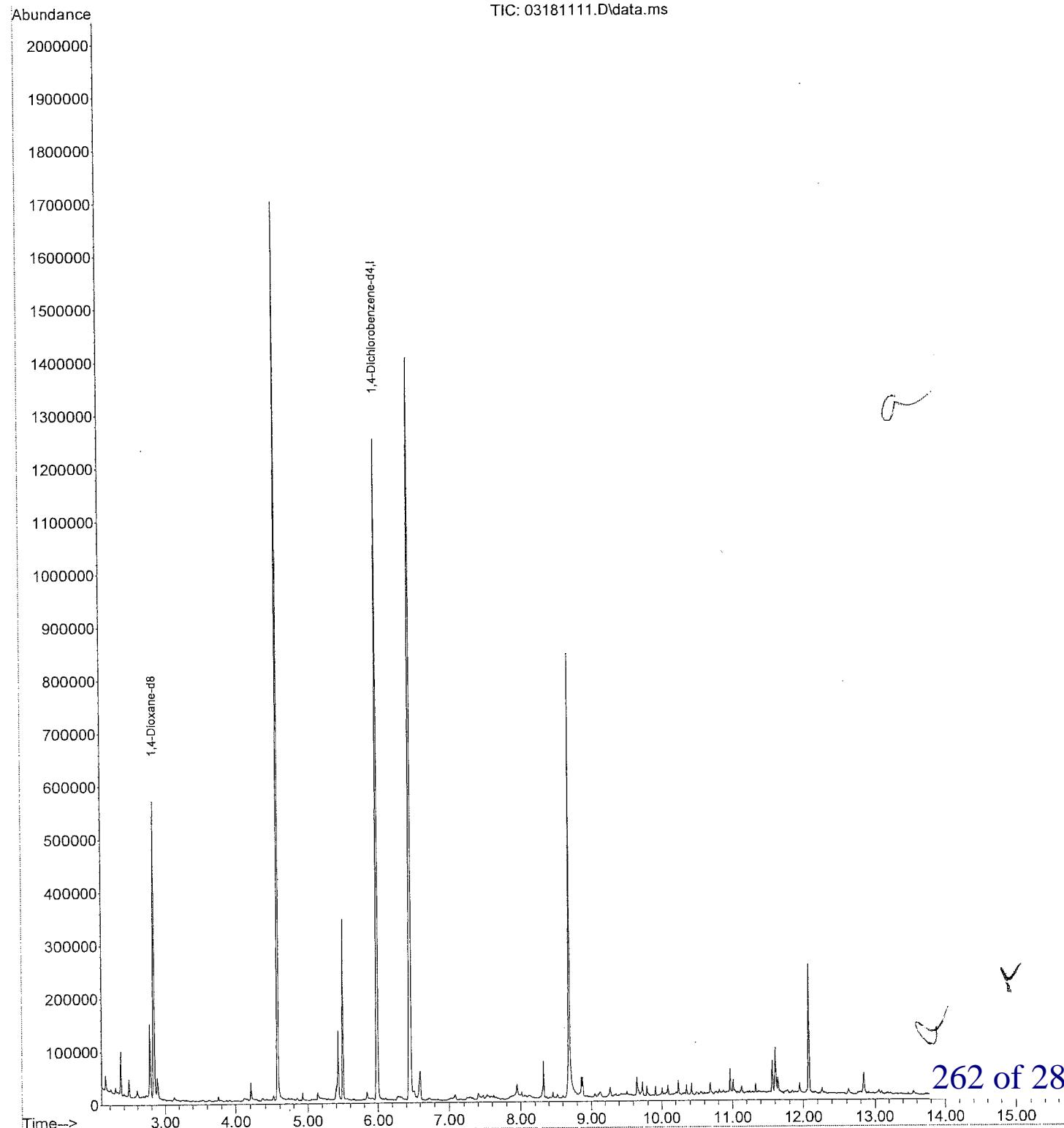
3/22/11

3/24/11  
261 of 285

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\0318111\Y  
Data File : 0318111.D  
Acq On : 18 Mar 2011 12:59 pm  
Operator : CL/AC  
Sample : PUC0982-02  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 15:23:29 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\0318111\03181106.D



## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181112.D  
 Acq On : 18 Mar 2011 1:26 pm  
 Operator : CL/AC  
 Sample : 11C0614-MS1  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 18 16:52:42 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2.828	96	196778	20.00	ug/mL	0.08
3) 1, 4-Dichlorobenzene-d4	5.992	152	222909	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.463	82	668424	16.73	ug/mL	-0.02
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2.881	88	226141	22.58	ug/mL	96
4) 1, 4-Dichlorobenzene	5.986	146	730	0.02	ug/mL#	1

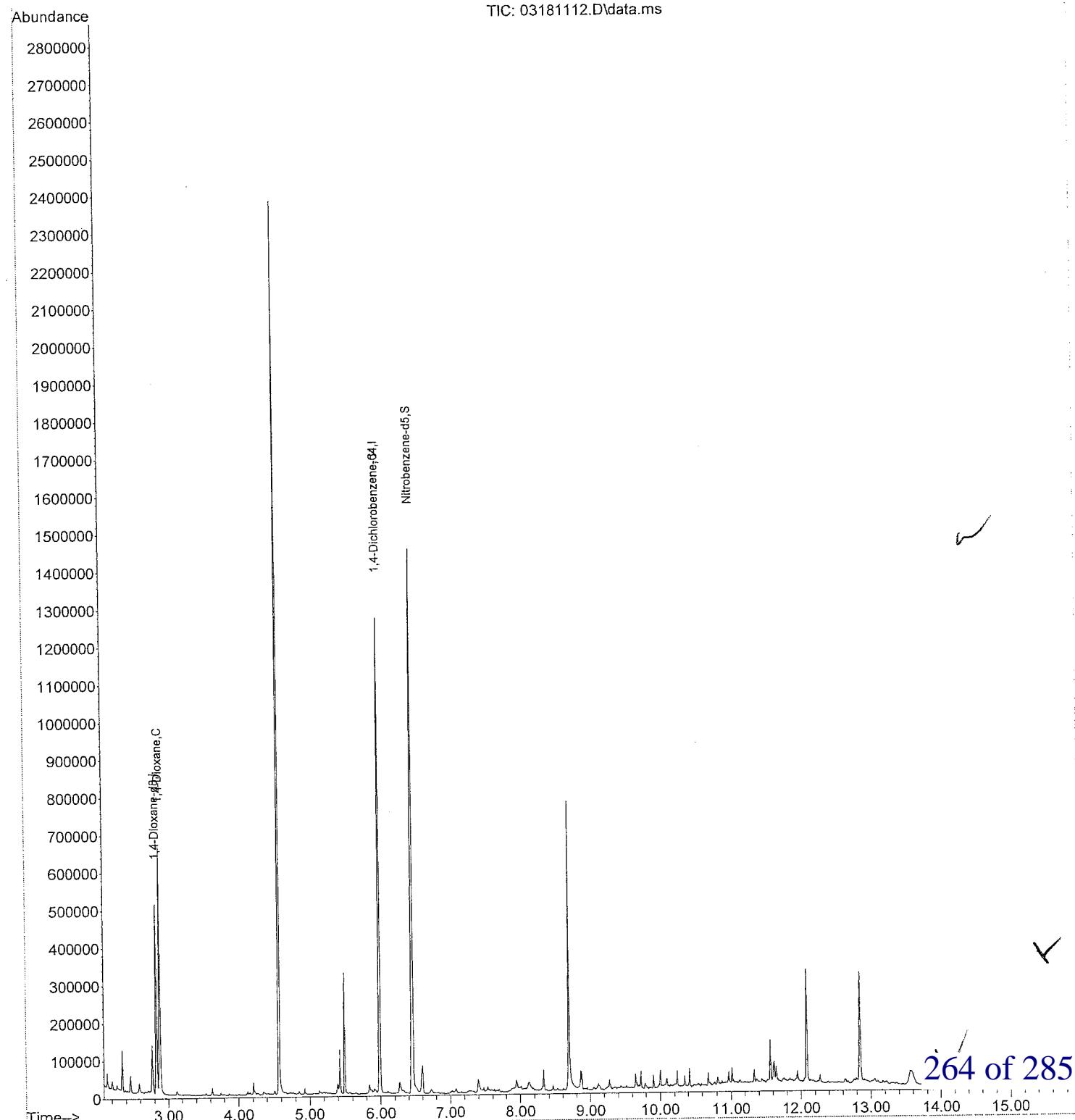
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/22/11  
263 of 285

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
Data File : 03181112.D  
Acq On : 18 Mar 2011 1:26 pm  
Operator : CL/AC  
Sample : 11C0614-MS1  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 18 16:52:42 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0614-MS1  
 Data File Name 03181112.D

Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\

Operator CL/AC

Date Acquired 3/18/2011 13:26

Misc Info

Instrument Name GCMS14

10ug/mL 14-diox-01520

03181106.D

D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	222909 /	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	<i>O</i>
1,4-Dichlorobenzene-d4	5.99 /	5.99	5.49	6.49	<-PASS

5/22/11

265 of 285

3/20/2011 10:31 AM

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181112.D  
 Acq On : 18 Mar 2011 1:26 pm  
 Operator : CL/AC  
 Sample : 11C0614-MS1  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 21 15:23:33 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 15:22:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	222909	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.828	96	196778	15.20	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/22/11  
266 of 285

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
Data File : 03181112.D  
Acq On : 18 Mar 2011 1:26 pm  
Operator : CL/AC  
Sample : 11C0614-MS1  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

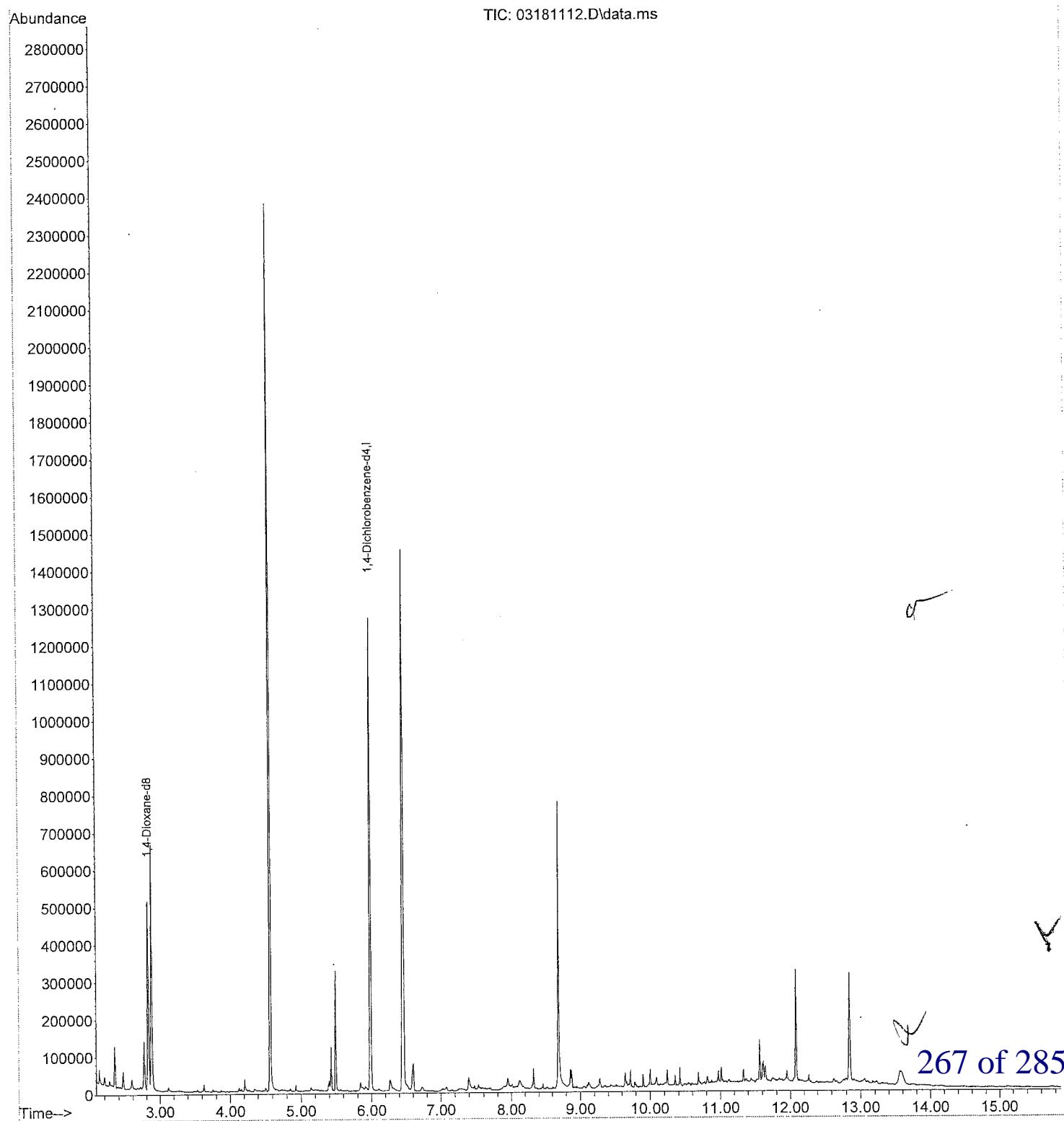
Quant Time: Mar 21 15:23:33 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 15:22:11 2011

Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\031811\03181106.D



## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 21 15:32:55 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25/2011  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.93	96	192014m	20.00	ug/mL	0.19
3) 1,4-Dichlorobenzene-d4	5.99	152	225522	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6.46	82	700223	17.33	ug/mL	-0.02
Target Compounds						Qvalue
2) 1,4-Dioxane	2.99	88	217434m	22.25	ug/mL	
4) 1,4-Dichlorobenzene	5.99	146	777	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

03/21/11

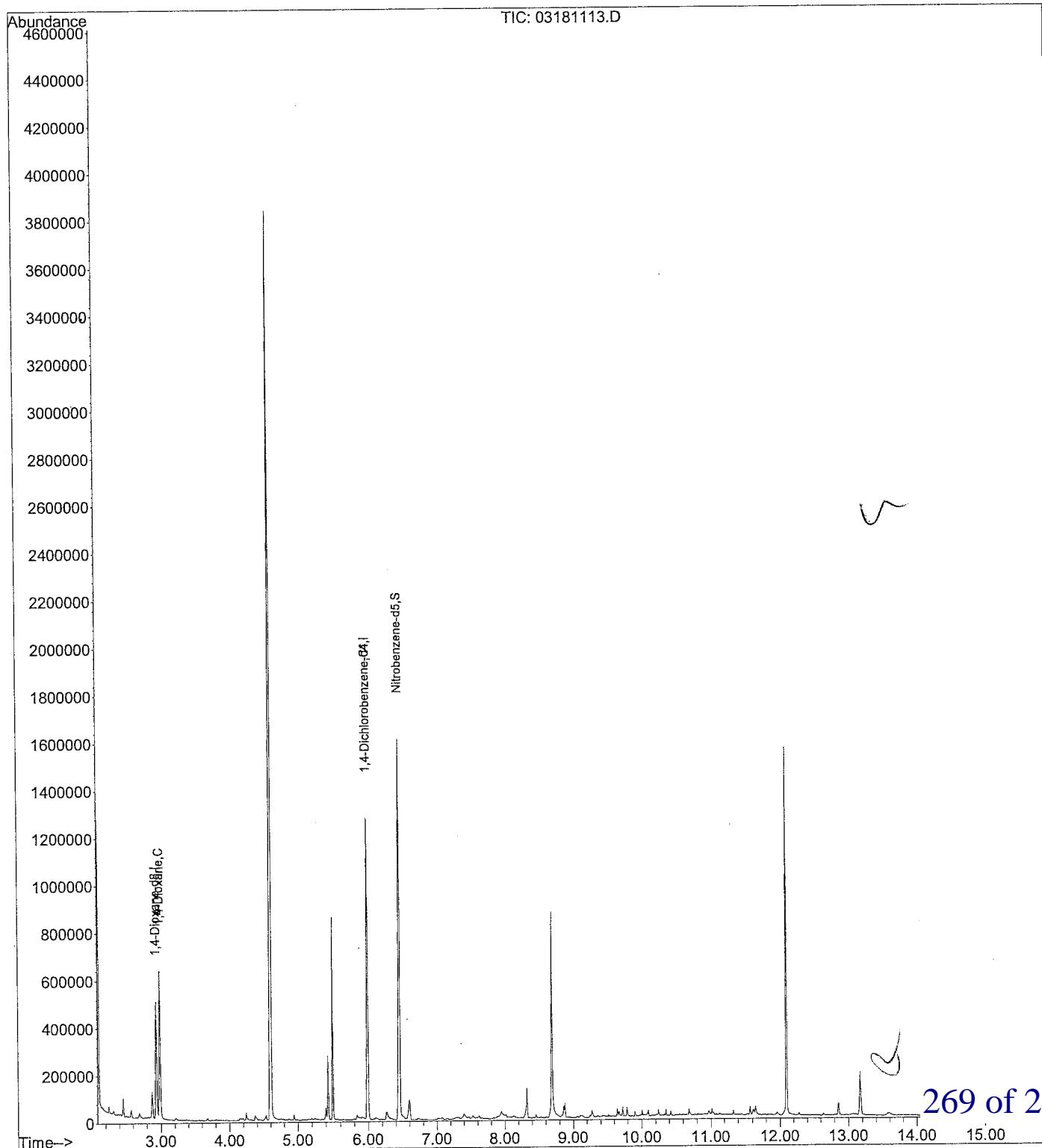
5/2/11

268 of 285

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031811\  
Data File : 03181113.D  
Acq On : 18 Mar 2011 1:52 pm  
Operator : CL/AC  
Sample : 11C0614-MSD1  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

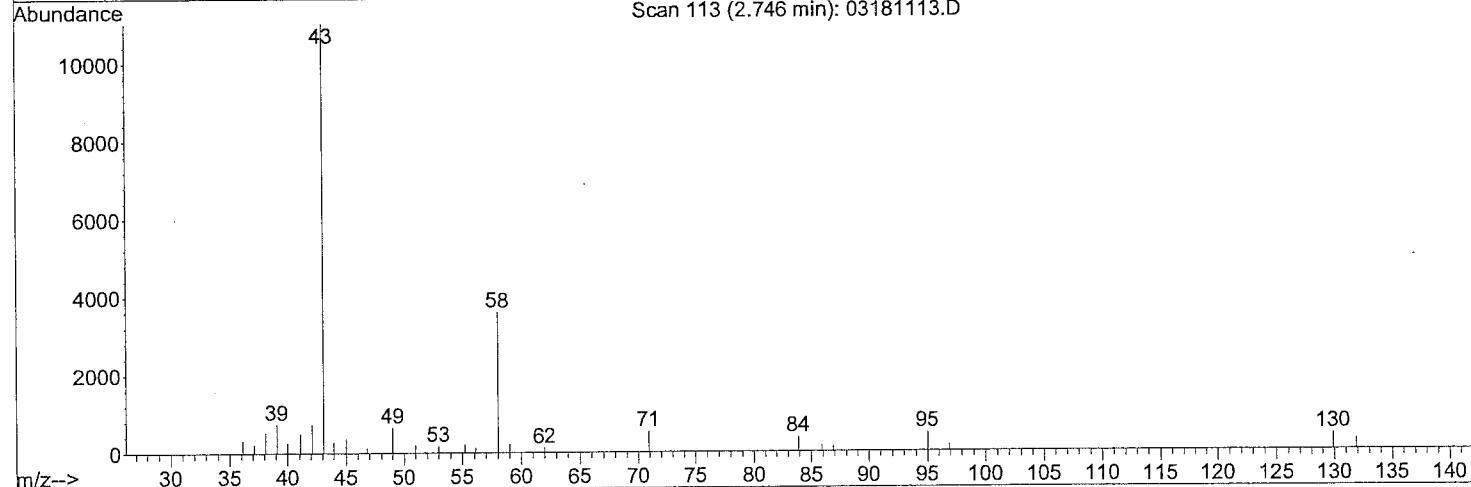
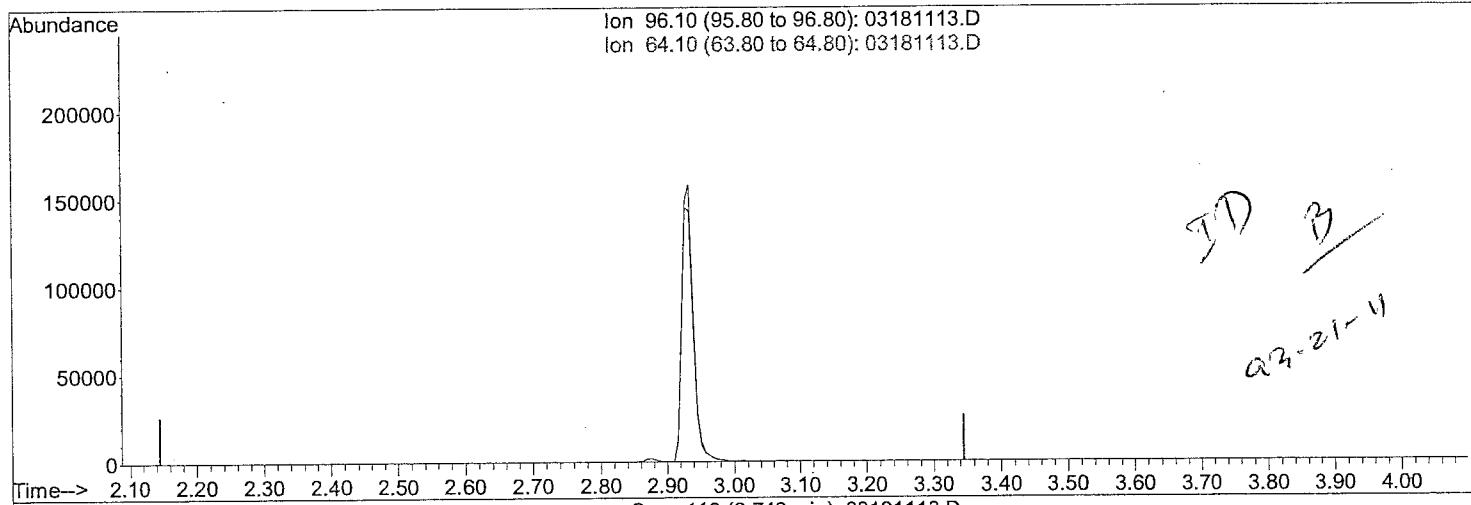
Quant Time: Mar 21 15:32:55 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 16:52:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



TIC: 03181113.D

(1) 1,4-Dioxane-d8 (l)

2.746min (-2.746) 0.00ug/mL

response 0

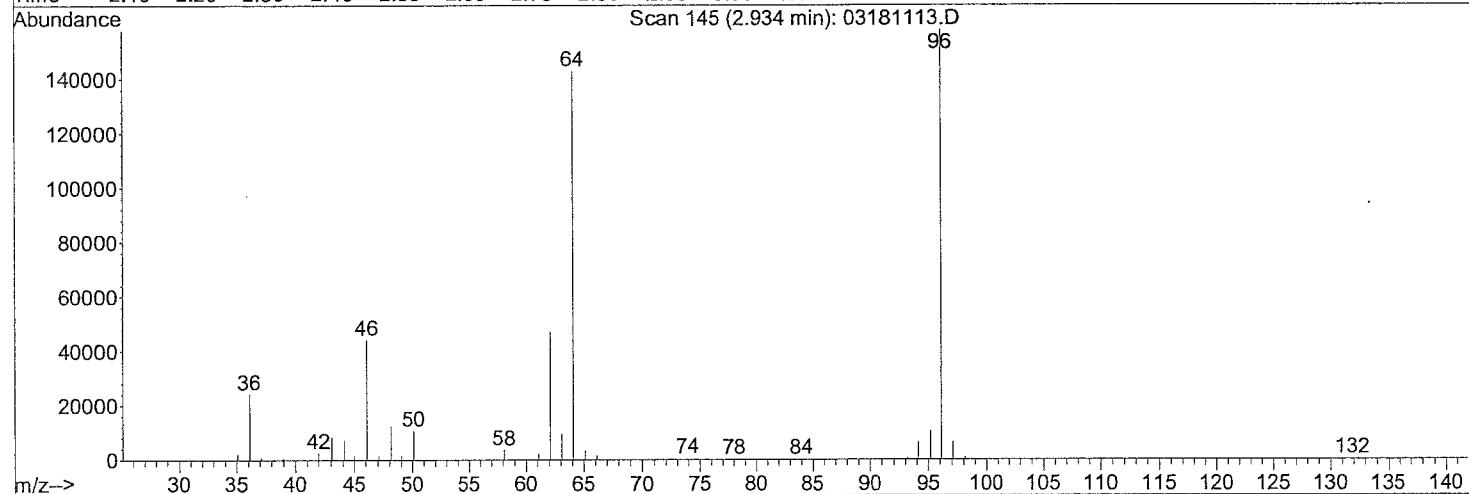
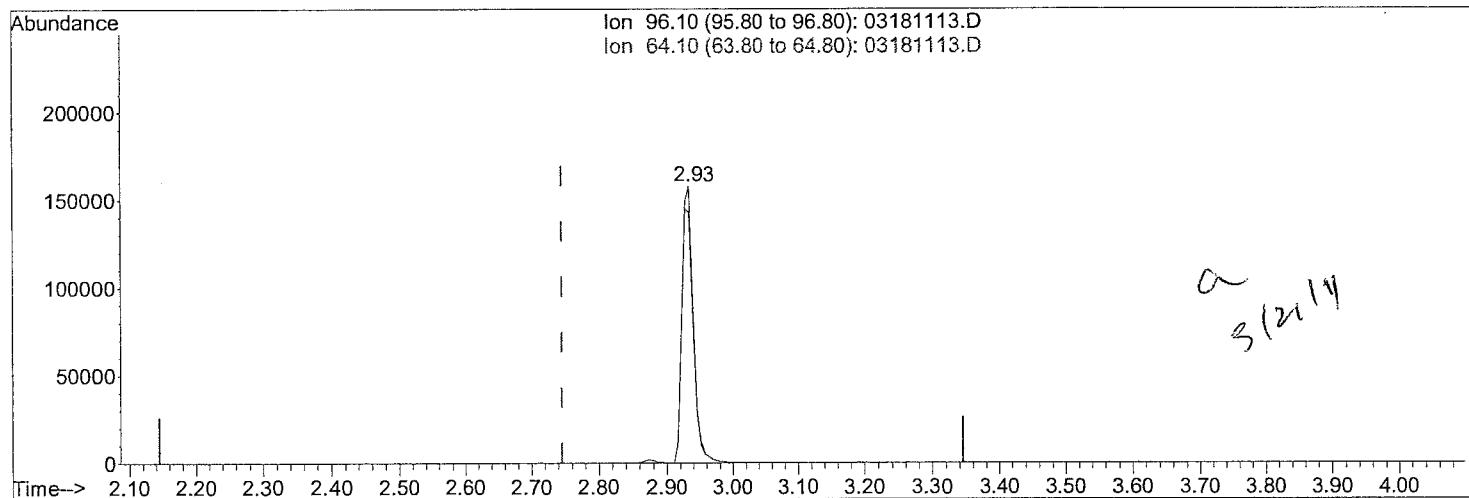
Ion	Exp%	Act%
96.10	100	0.00
64.10	93.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

270 of 285

Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 16:52:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



TIC: 03181113.D

(1) 1,4-Dioxane-d8 (I)

2.934min (+0.188) 20.00ug/mL m

response 192014

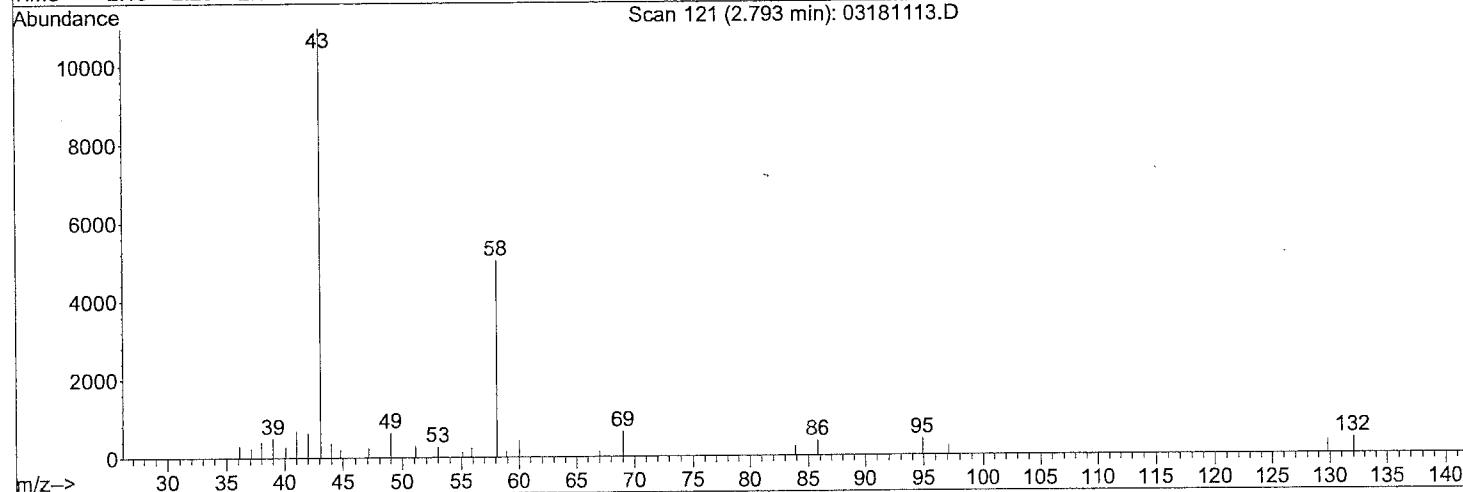
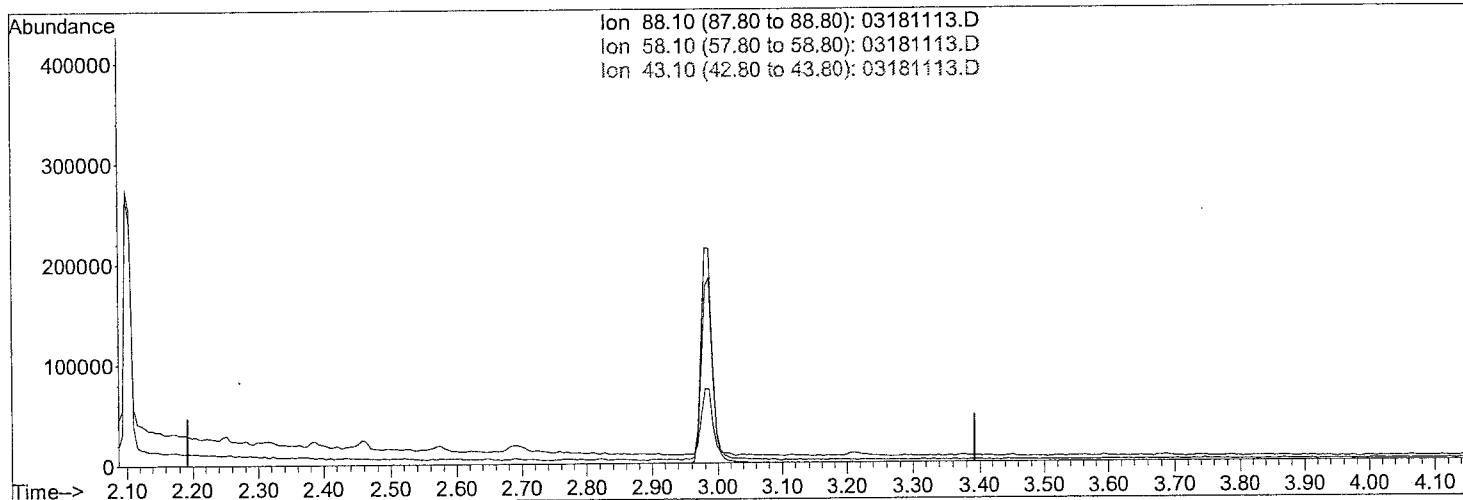
Ion	Exp%	Act%
96.10	100	100
64.10	93.60	93.10
0.00	0.00	0.00
0.00	0.00	0.00

271 of 285

Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 16:52:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



TIC: 03181113.D

(2) 1,4-Dioxane (C)

2.793min (-2.793) 0.00ug/mL

response 0

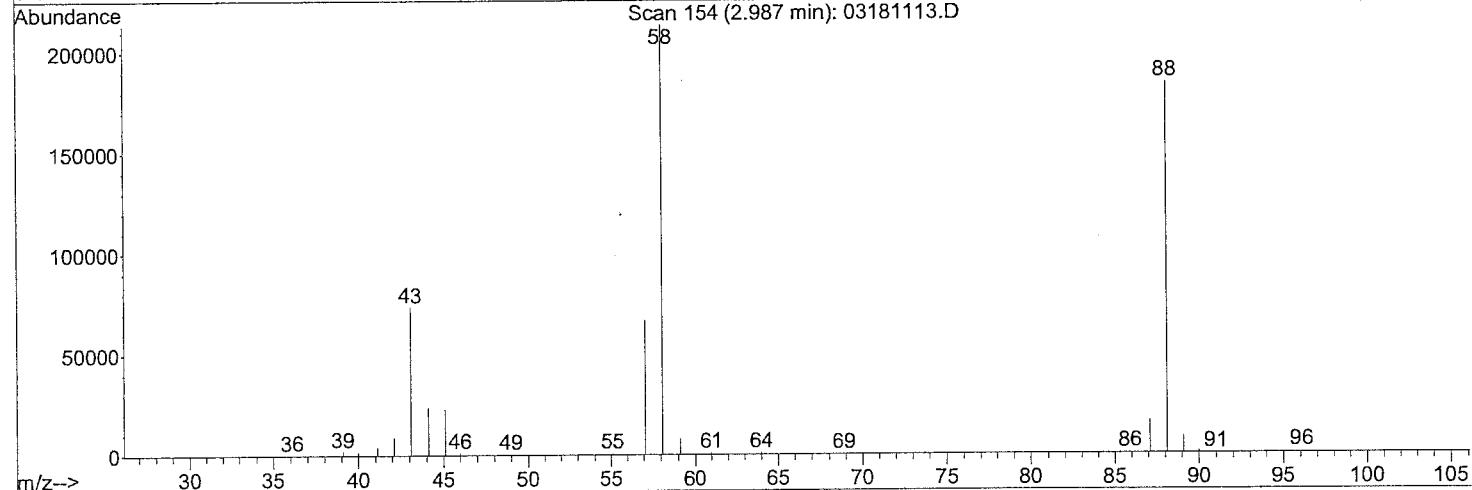
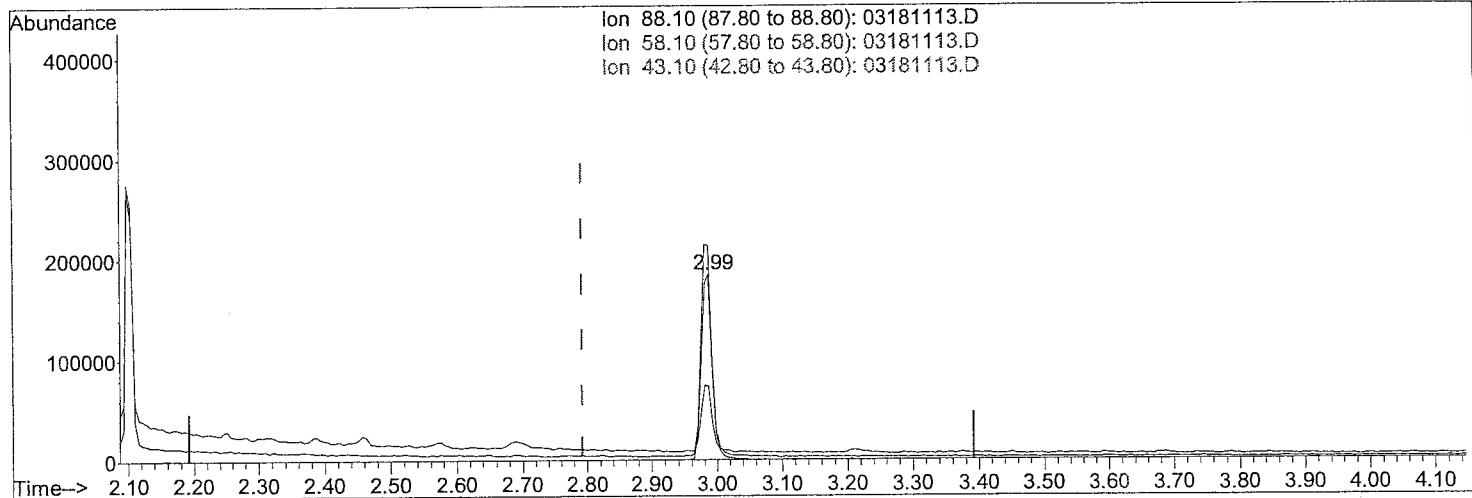
Ion	Exp%	Act%
88.10	100	0.00
58.10	112.80	0.00#
43.10	35.80	0.00#
0.00	0.00	0.00

272 of 285

## Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 16:52:47 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



TIC: 03181113.D

(2) 1,4-Dioxane (C)

2.987min (+0.194) 22.25ug/mL m

response 217434

Ion	Exp%	Act%
88.10	100	100
58.10	112.80	123.73
43.10	35.80	48.44
0.00	0.00	0.00

A  
 273 of 285  
 5/22/11  
 B  
 273 of 285

Sample Name 11C0614-MSD1  
 Data File Name 03181113.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 13:52  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	225522	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

3/18/11

274 of 285

3/20/2011 10:31 AM

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031811\  
Data File : 03181113.D  
Acq On : 18 Mar 2011 1:52 pm  
Operator : CL/AC  
Sample : 11C0614-MSD1  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 21 15:54:08 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	5.99	152	225522	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane-d8	2.93	96	191403m	14.62	ug/mL	

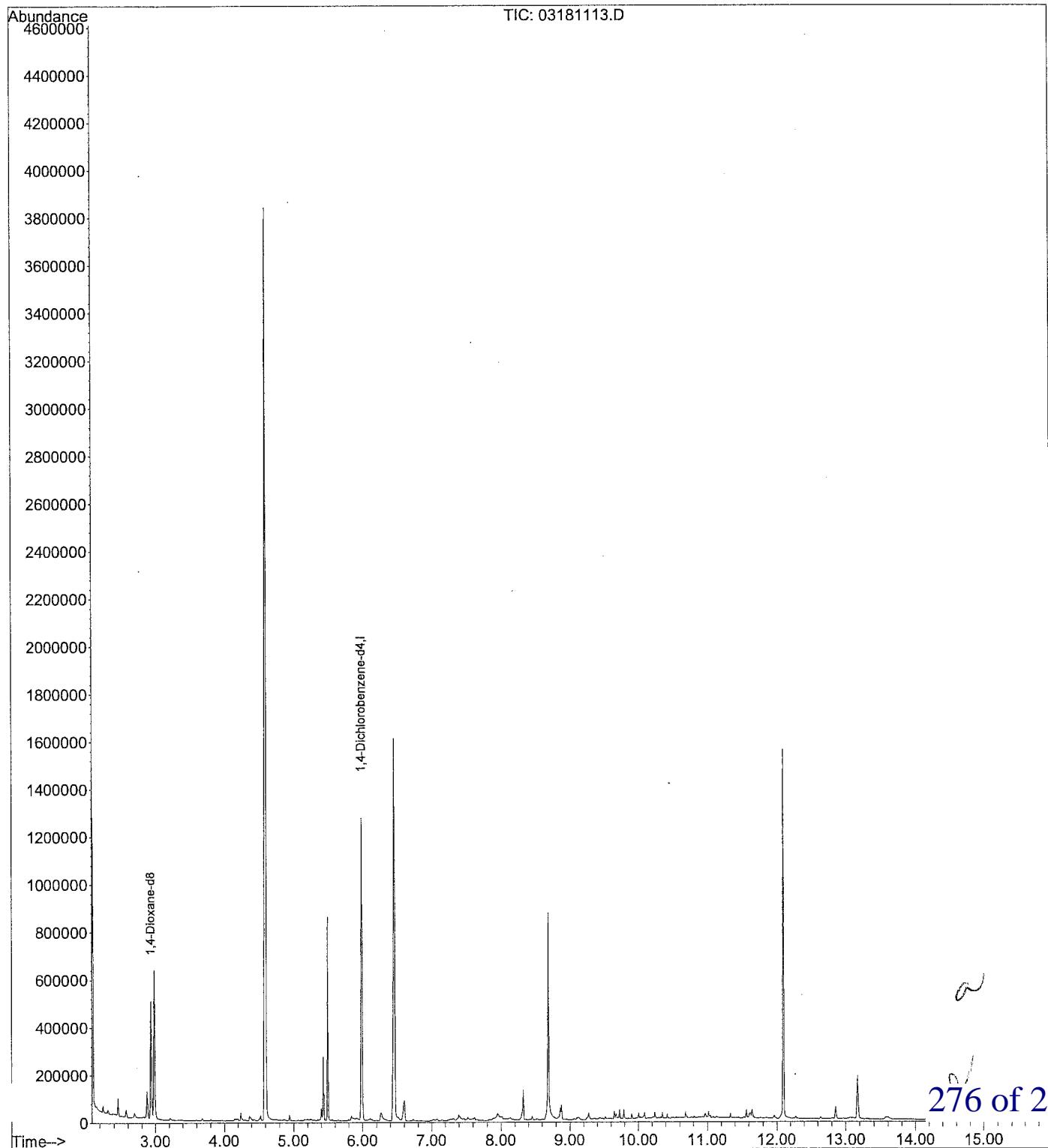
(#) = qualifier out of range (m) = manual integration (+) = signals summed

03/21/11  
3/21/11  
275 of 285

## Quantitation Report (QT Reviewed)

Data Path : N:\DATA\031811\  
Data File : 03181113.D  
Acq On : 18 Mar 2011 1:52 pm  
Operator : CL/AC  
Sample : 11C0614-MSD1  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

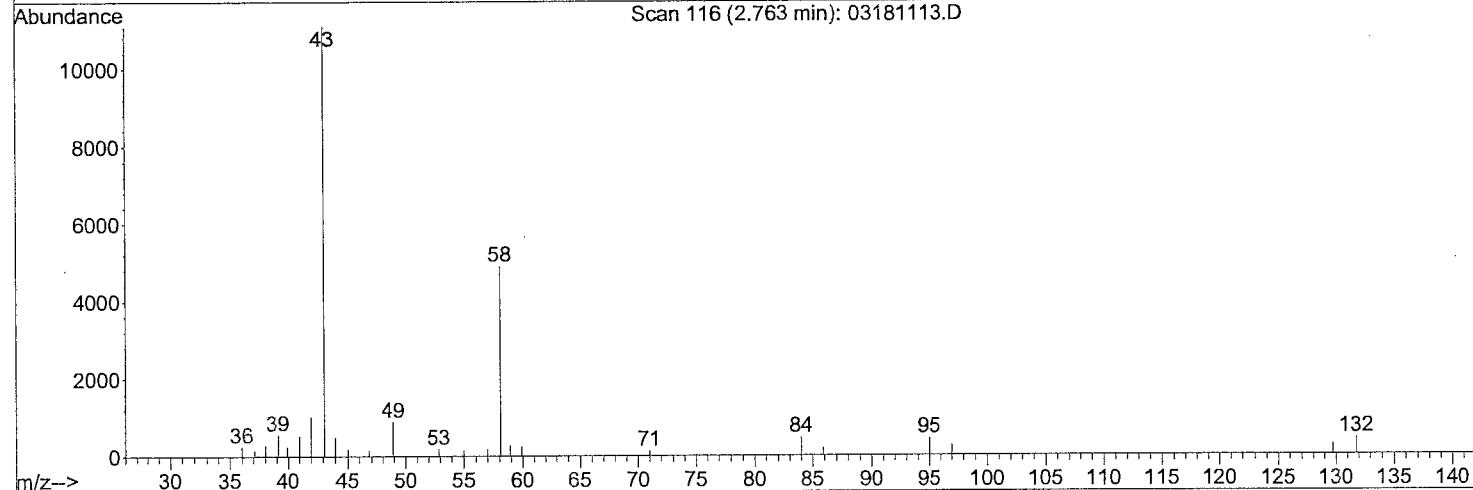
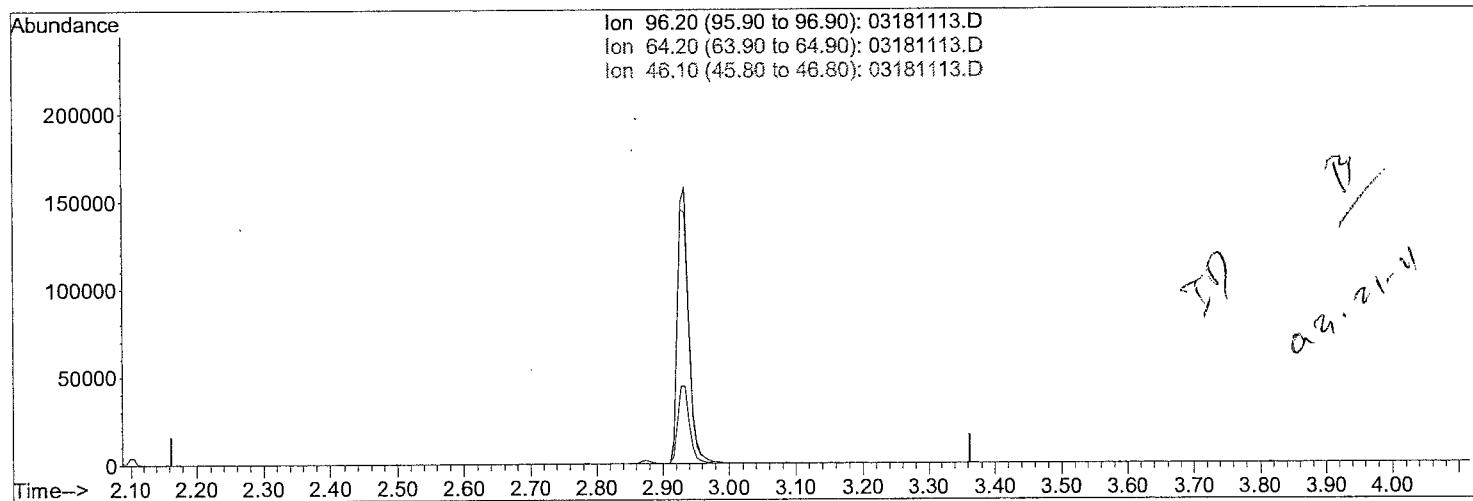
Quant Time: Mar 21 15:54:08 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D



Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 21 15:23:37 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 15:22:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D



TIC: 03181113.D

(2) 1,4-Dioxane-d8

2.763min (-2.763) 0.00ug/mL

response 0

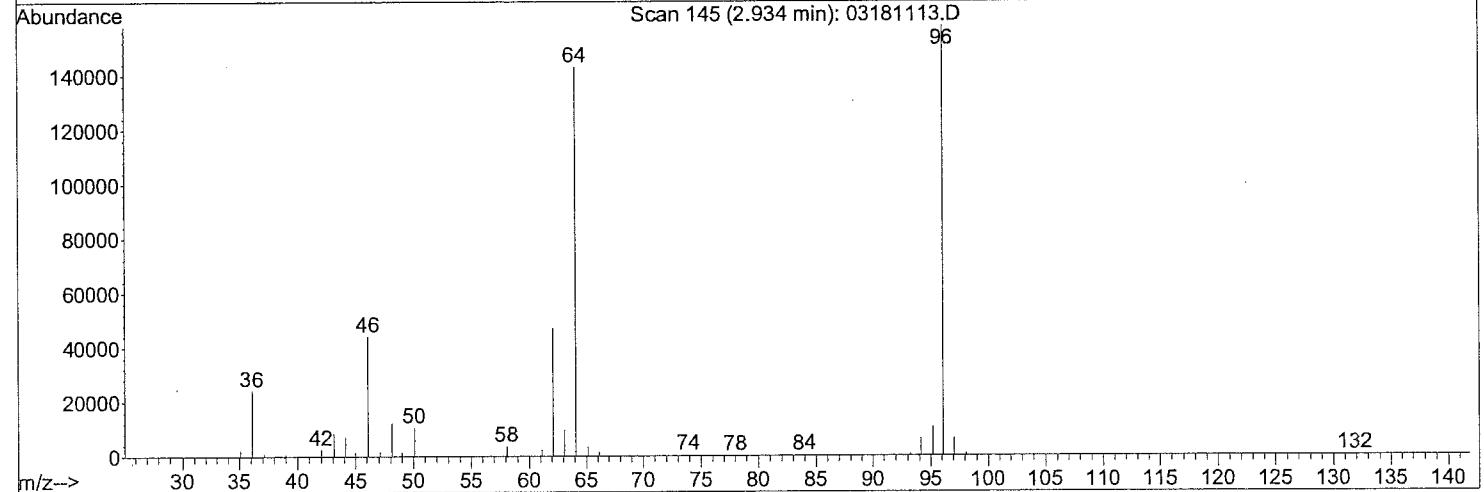
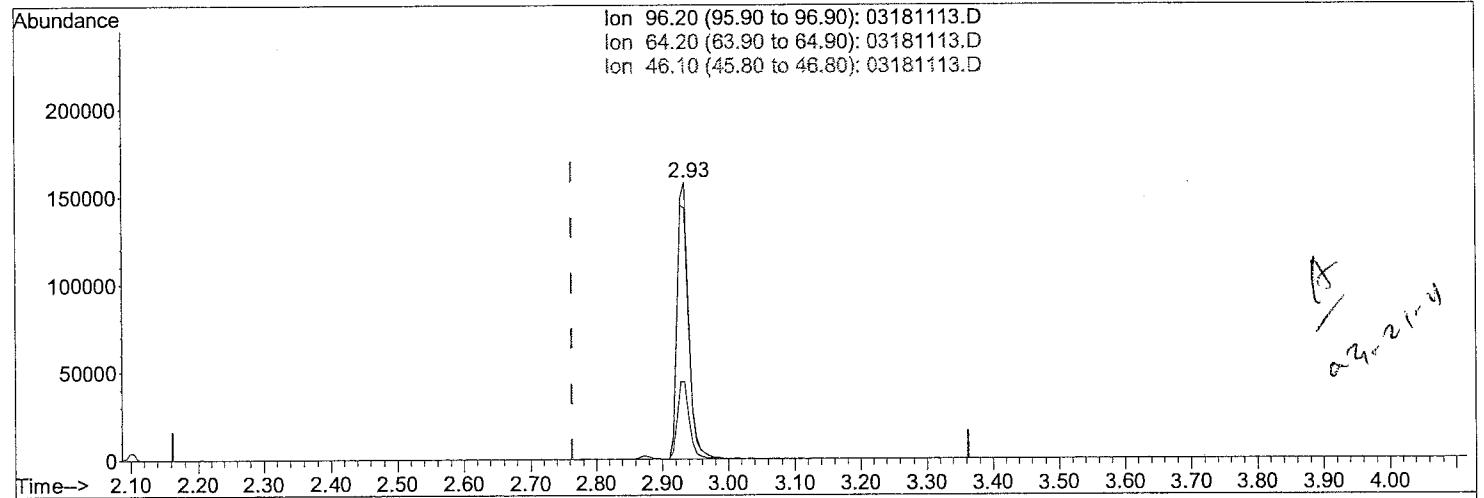
Ion	Exp%	Act%
96.20	100	0.00
64.20	91.30	0.00#
46.10	30.00	0.00#
0.00	0.00	0.00

277 of 285

Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181113.D  
 Acq On : 18 Mar 2011 1:52 pm  
 Operator : CL/AC  
 Sample : 11C0614-MSD1  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 21 15:23:37 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
 Quant Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 15:22:11 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D



TIC: 03181113.D

(2) 1,4-Dioxane-d8

2.934min (+0.170) 14.62ug/mL m

response 191403

Ion	Exp%	Act%
96.20	100	100
64.20	91.30	93.22
46.10	30.00	28.41
0.00	0.00	0.00

278 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\Ymsdchem\Y1\GCMS14\DATA\031811  
 Data File : 03181122.D  
 Acq On : 18 Mar 2011 5:51 pm  
 Operator : CL/AC  
 Sample : PUC1004-01  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 18 18:16:58 2011  
 Quant Method : D:\Ymsdchem\Y1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1/4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards		R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8		2. 845	96	186962	20.00	ug/mL	0.10
3) 1, 4-Dichlorobenzene-d4		5. 992	152	221353	10.00	ug/mL	-0.02
System Monitoring Compounds							
6) Nitrobenzene-d5		6. 457	82	656703	16.56	ug/mL	-0.02
Target Compounds							
2) 1, 4-Dioxane		2. 898	88	12950m	1.36	ug/mL	Qvalue
4) 1, 4-Dichlorobenzene		5. 992	146	571	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/21/11

3/21/11

279 of 285

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\

Data File : 03181122.D

Acq On : 18 Mar 2011 5:51 pm

Operator : CL/AC

Sample : PUC1004-01

Misc :

ALS Vial : 22 Sample Multiplier: 1

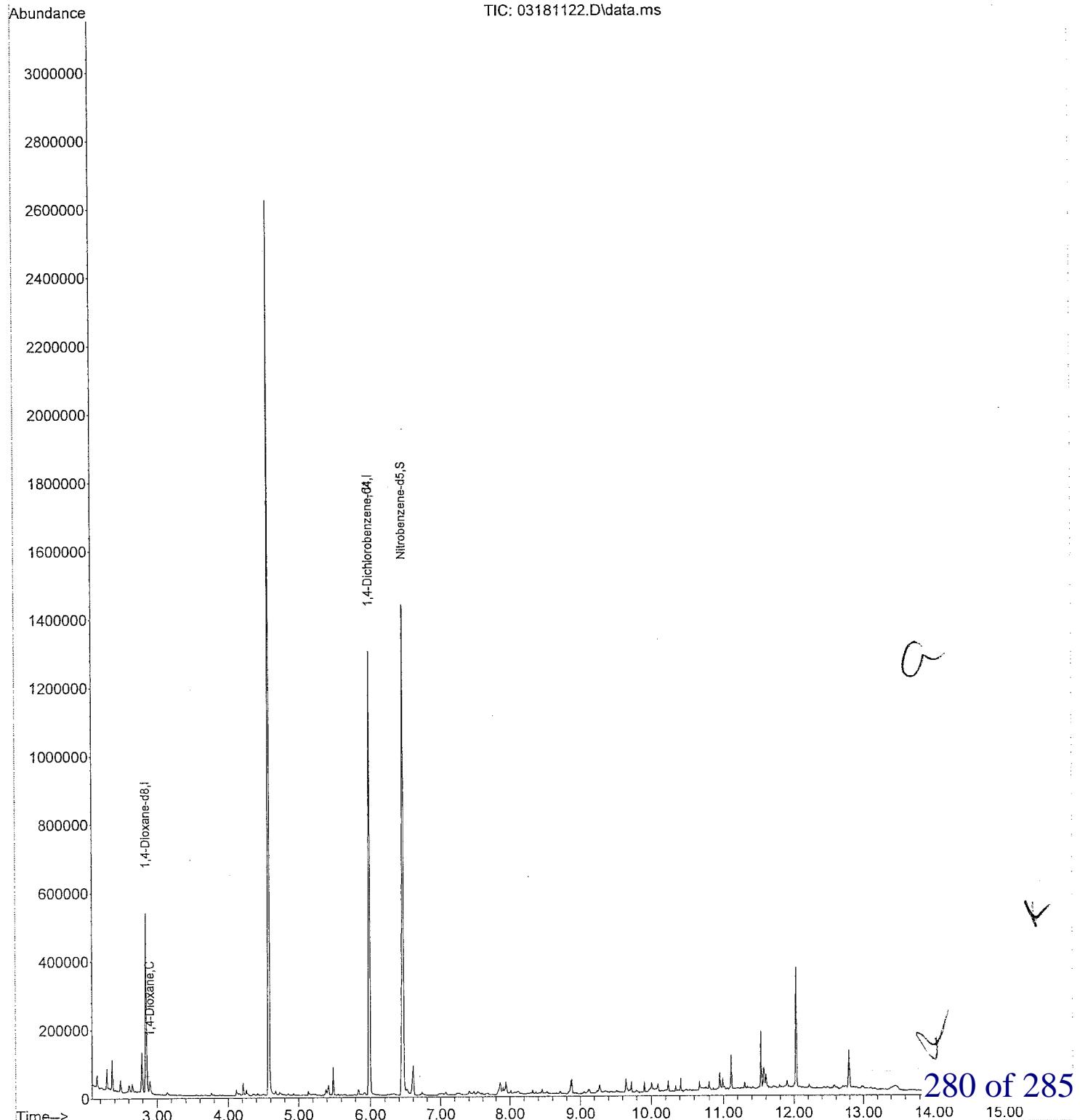
Quant Time: Mar 18 18:16:58 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

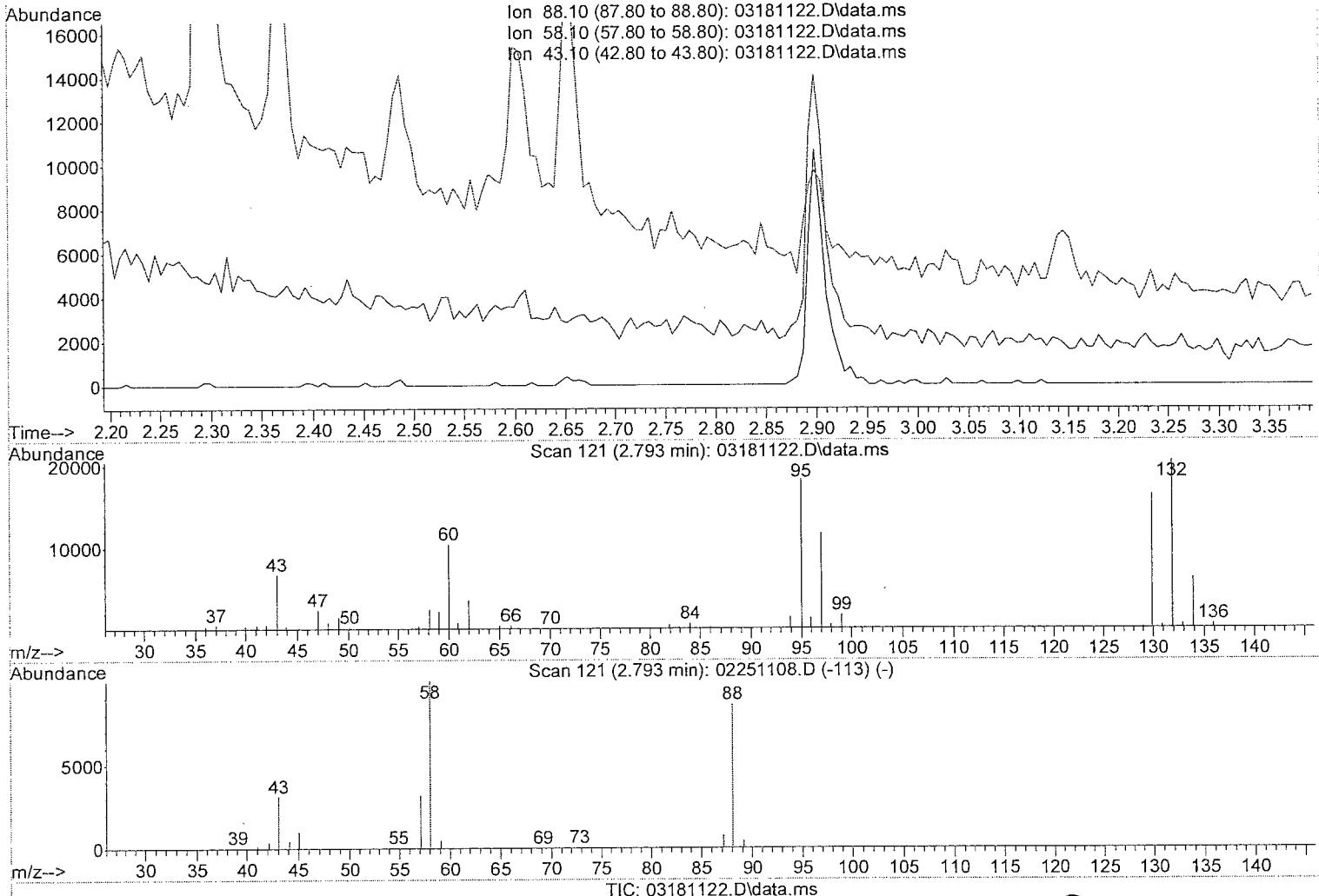
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
 Data File : 03181122.D  
 Acq On : 18 Mar 2011 5:51 pm  
 Operator : CL/AC  
 Sample : PUC1004-01  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 18 18:14:33 2011  
 Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.793min (-2.793) 0.00ug/mL

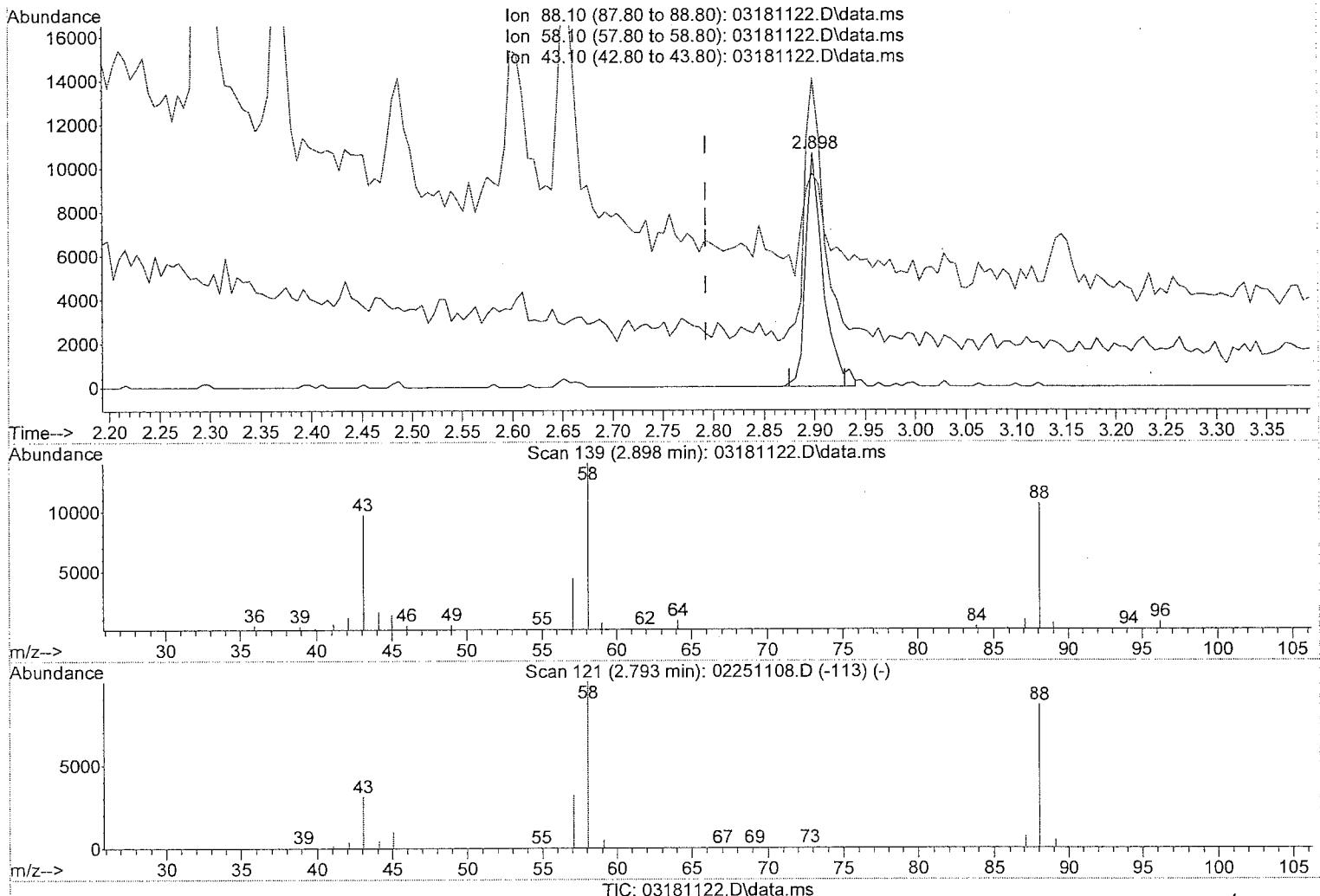
response 0

Ion	Exp%	Act%
88.10	100	0.00
58.10	112.80	0.00#
43.10	35.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
 Data File : 03181122.D  
 Acq On : 18 Mar 2011 5:51 pm  
 Operator : CL/AC  
 Sample : PUC1004-01  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 18 18:14:33 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.898min (+0.106) 1.36ug/mL m

response 12950

Ion	Exp%	Act%
88.10	100	100
58.10	112.80	106.56
43.10	35.80	42.49
0.00	0.00	0.00

Sample Name PUC1004-01  
 Data File Name 03181122.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 17:51  
 Misc Info

Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181106.D  
 D:\msdchem\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	221353 ✓	236564	118282	473128	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49	<-PASS

✓

3/22/11

283 of 285

3/20/2011 10:31 AM

Quantitation Report *(Not Reviewed)*

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181122.D  
 Acq On : 18 Mar 2011 5:51 pm  
 Operator : CL/AC  
 Sample : PUC1004-01  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 21 15:24:14 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 15:22:11 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 992	152	221353	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 845	96	187083	14. 56	ug/mL	99

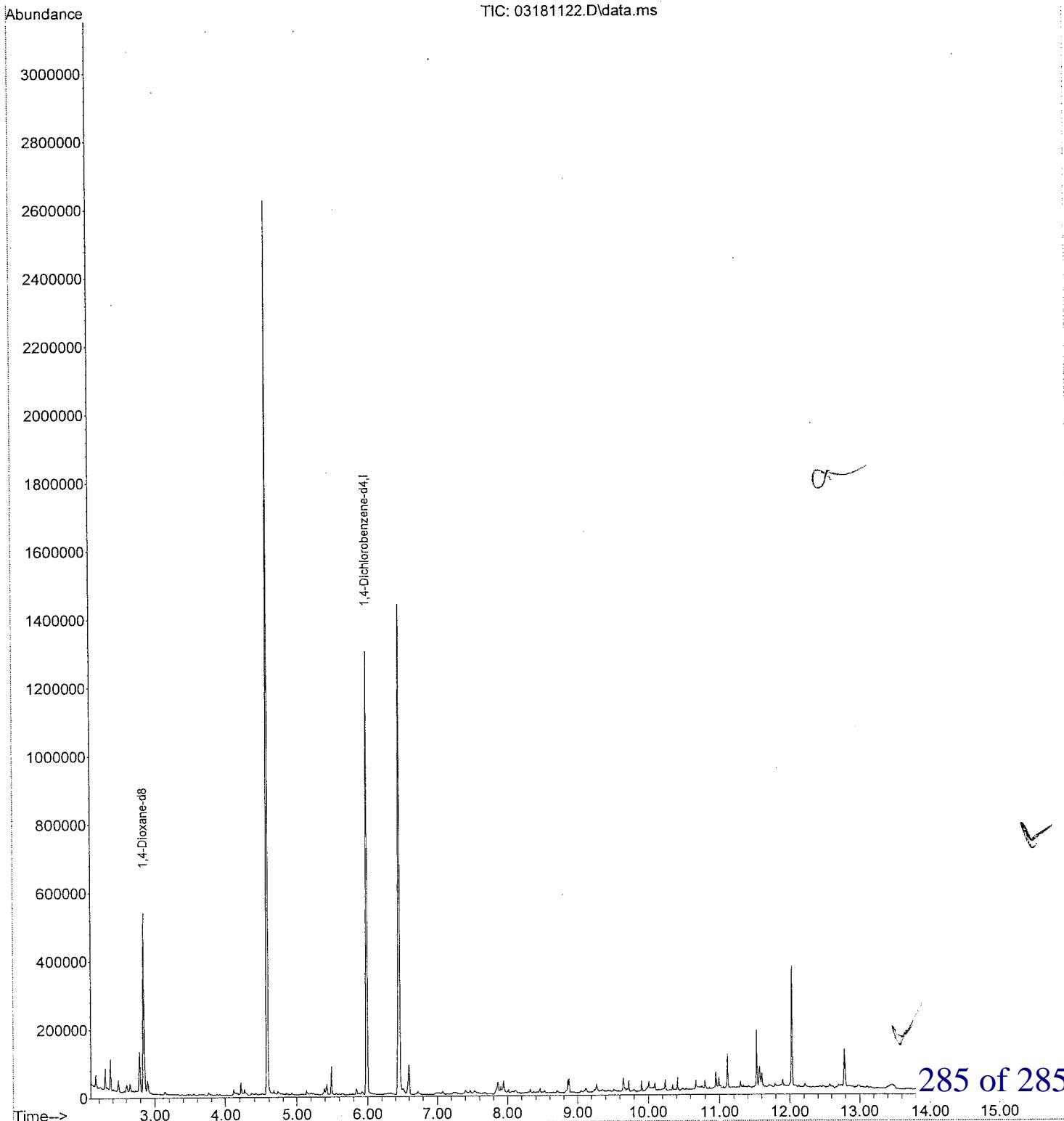
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*R. Bizzell*  
*Steth*

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811  
Data File : 03181122.D  
Acq On : 18 Mar 2011 5:51 pm  
Operator : CL/AC  
Sample : PUC1004-01  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 21 15:24:14 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811A\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 15:22:11 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181106.D





### **Level III Data Package**

Environmental Resources Management Inc.

### **TestAmerica Work Order Number:**

PUC1113

### **Prepared for:**

Jason Hilker  
Environmental Resources Management, Inc.  
7272 East Indian School Road, Suite 100  
Scottsdale, AZ 85251



## QA/QC DATA PACKAGE: LEVEL III

### TABLE SUMMARY

	Page Number
CASE NARRATIVE.....	3
CHAIN OF CUSTODY.....	4-5
ANALYTICAL REPORTS.....	6-9
QUALITY CONTROL SUMMARIES.....	10-23
METHOD 8260	
CALIBRATION DATA.....	24-130
ANALYTICAL DATA.....	131-179
METHOD MODIFIED 8270C (1,4-DIOXANE)	
DIGESTION and/or EXTRACTION.....	180-182
CALIBRATION DATA.....	183-224
ANALYTICAL DATA.....	225-262

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602)  
454-9303

## LABORATORY REPORT

Prepared For: Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251

Attention: Jason Hilker

Project: 0096498.009

Sampled: 03/16/11  
Received: 03/16/11  
Issued: 03/24/11 08:47

NELAP #01109CA Arizona DHS#AZ0728

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.*

*This entire report was reviewed and approved for release.*

## CASE NARRATIVE

### LABORATORY ID

PUC1113-01

### CLIENT ID

OU3-5MR-M-031611

### MATRIX

Water

SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.  
L3-Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.  
R1-The RPD exceeded the acceptance limit.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Kylie Emily  
Project Manager

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

QA/QC DATA PACKAGE: LEVEL III

**CHAIN OF CUSTODY FORMS**

TestAmerica.com

CHAIN OF CUSTODY FORM

**THE LEADER IN ENVIRONMENTAL TESTING**

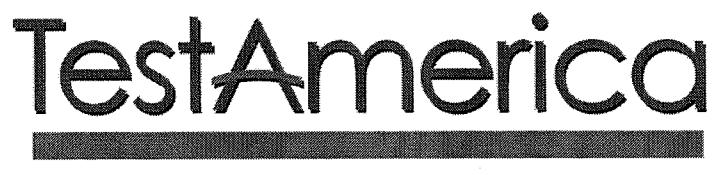
[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803

7

Client Name/Address:	ERM 7272 E. Indian School Rd Scottsdale, AZ 85251	Project/PO Number:	0096498.009	Analysis Required			
Project Manager:	Jason Miller	Phone Number:	480-948-2401	PUC 1113-01			
Send Report to:	Jason.Miller@ERM.com	Fax Number:	480-998-3106				
Sampler:	Adam Norie						
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Special Instructions
D03 - SMR - M - D31611	W	40mL 1L	3/2	3/16/01	0446	HCl -	LEVEL 3
Relinquished By:	Date/ Time:	Received By:	Date/ Time:	Turnaround Time: (Check)			
<i>J. Miller / ERN</i>	3/16/01 1630			same day	72 hours		
Relinquished By:	Date/ Time:	Received By:	Date/ Time:	24 hours	5 days		
				48 hours	normal	<input checked="" type="checkbox"/>	
Relinquished By:	Date/ Time:	Received in Lab By:	Date/ Time:	Sample Integrity: (Check)			
		<i>Adam Norie</i>	3/16/01 1630	intact	on ice	<input checked="" type="checkbox"/>	

**Note:** By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

216



THE LEADER IN ENVIRONMENTAL TESTING

## QA/QC DATA PACKAGE: LEVEL III

## ANALYTICAL REPORTS

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1113-01 (OU3-5MR-M-031611 - Water)</b>								
<b>Reporting Units: ug/l</b>								
Acetone	EPA 8260B	11C0791	10	ND	1	3/22/2011	3/22/2011	V1
Benzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromochloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromodichloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Bromoform	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Bromomethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
2-Butanone (MEK)	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
n-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
sec-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
tert-Butylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Carbon disulfide	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Carbon tetrachloride	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Chlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Chloroethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
<b>Chloroform</b>	EPA 8260B	11C0791	0.50	<b>0.97</b>	1	3/22/2011	3/22/2011	
Chloromethane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
2-Chlorotoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
4-Chlorotoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dibromochloromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dibromo-3-chloropropane	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
1,2-Dibromoethane (EDB)	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dibromomethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,4-Dichlorobenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Dichlorodifluoromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>1,1-Dichloroethane</b>	EPA 8260B	11C0791	0.50	<b>5.1</b>	1	3/22/2011	3/22/2011	
1,2-Dichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>1,1-Dichloroethene</b>	EPA 8260B	11C0791	0.50	<b>7.0</b>	1	3/22/2011	3/22/2011	
<b>cis-1,2-Dichloroethene</b>	EPA 8260B	11C0791	0.50	<b>10</b>	1	3/22/2011	3/22/2011	
trans-1,2-Dichloroethene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2-Dichloropropane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3-Dichloropropane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
2,2-Dichloropropane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,1-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
cis-1,3-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
trans-1,3-Dichloropropene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Ethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Hexachlorobutadiene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	

### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1113-01 (OU3-5MR-M-031611 - Water) - cont.</b>								
Reporting Units: ug/l								
2-Hexanone	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
Iodomethane	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	L3
Isopropylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
p-Isopropyltoluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Methylene Chloride	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Naphthalene	EPA 8260B	11C0791	2.5	ND	1	3/22/2011	3/22/2011	
n-Propylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Styrene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,1,2-Tetrachloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,2,2-Tetrachloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>Tetrachloroethene</b>	EPA 8260B	11C0791	0.50	<b>2.3</b>	1	3/22/2011	3/22/2011	
Toluene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2,3-Trichlorobenzene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,2,4-Trichlorobenzene	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,1,1-Trichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,1,2-Trichloroethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
<b>Trichloroethene</b>	EPA 8260B	11C0791	0.50	<b>50</b>	1	3/22/2011	3/22/2011	
Trichlorofluoromethane	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,2,3-Trichloropropane	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
1,2,4-Trimethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
1,3,5-Trimethylbenzene	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Vinyl Acetate	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Vinyl chloride	EPA 8260B	11C0791	0.50	ND	1	3/22/2011	3/22/2011	
Xylenes, Total	EPA 8260B	11C0791	1.0	ND	1	3/22/2011	3/22/2011	
Freon 113	EPA 8260B	11C0791	2.0	ND	1	3/22/2011	3/22/2011	

Surrogate: Dibromofluoromethane (70-130%)

Surrogate: Toluene-d8 (70-130%)

Surrogate: 4-Bromofluorobenzene (70-130%)

95 %

91 %

89 %

### TestAmerica Phoenix

Kylie Emily  
Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11  
Received: 03/16/11

## 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: PUC1113-01 (OU3-5MR-M-031611 - Water)</b>								
Reporting Units: ug/l								
1,4-Dioxane	SW8270C	11C0675	1.0	2.3	1	3/17/2011	3/18/2011	
Surrogate: 1,4-Dioxane-d8 (20-105%)				67 %				
Surrogate: Nitrobenzene-d5 (30-130%)				78 %				

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9 of 262  
PUC1113 <Page 262>



THE LEADER IN ENVIRONMENTAL TESTING

## QA/QC DATA PACKAGE: LEVEL III

## QUALITY CONTROL SUMMARIES

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0791 Extracted: 03/22/11</b>										
Blank Analyzed: 03/22/2011 (11C0791-BLK1)										
Acetone	ND	10	ug/l							V1
Benzene	ND	0.50	ug/l							
Bromobenzene	ND	0.50	ug/l							
Bromochloromethane	ND	0.50	ug/l							
Bromodichloromethane	ND	0.50	ug/l							
Bromoform	ND	1.0	ug/l							
Bromomethane	ND	1.0	ug/l							
2-Butanone (MEK)	ND	2.5	ug/l							
n-Butylbenzene	ND	0.50	ug/l							
sec-Butylbenzene	ND	0.50	ug/l							
tert-Butylbenzene	ND	0.50	ug/l							
Carbon disulfide	ND	0.50	ug/l							
Carbon tetrachloride	ND	0.50	ug/l							
Chlorobenzene	ND	0.50	ug/l							
Chloroethane	ND	1.0	ug/l							
Chloroform	ND	0.50	ug/l							
Chloromethane	ND	1.0	ug/l							
2-Chlorotoluene	ND	0.50	ug/l							
4-Chlorotoluene	ND	0.50	ug/l							
Dibromochloromethane	ND	0.50	ug/l							
1,2-Dibromo-3-chloropropane	ND	2.5	ug/l							
1,2-Dibromoethane (EDB)	ND	0.50	ug/l							
Dibromomethane	ND	0.50	ug/l							
1,2-Dichlorobenzene	ND	0.50	ug/l							
1,3-Dichlorobenzene	ND	0.50	ug/l							
1,4-Dichlorobenzene	ND	0.50	ug/l							
Dichlorodifluoromethane	ND	0.50	ug/l							
1,1-Dichloroethane	ND	0.50	ug/l							
1,2-Dichloroethane	ND	0.50	ug/l							
1,1-Dichloroethene	ND	0.50	ug/l							
cis-1,2-Dichloroethene	ND	0.50	ug/l							
trans-1,2-Dichloroethene	ND	0.50	ug/l							
1,2-Dichloropropane	ND	0.50	ug/l							
1,3-Dichloropropane	ND	0.50	ug/l							
2,2-Dichloropropane	ND	1.0	ug/l							

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Kylie Emily  
Project Manager

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Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009  
Report Number: PUC1113

Sampled: 03/16/11  
Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Blank Analyzed: 03/22/2011 (11C0791-BLK1)</b>										
1,1-Dichloropropene	ND	0.50	ug/l							
cis-1,3-Dichloropropene	ND	0.50	ug/l							
trans-1,3-Dichloropropene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Hexachlorobutadiene	ND	1.0	ug/l							
2-Hexanone	ND	2.5	ug/l							
Iodomethane	ND	2.5	ug/l							
Isopropylbenzene	ND	0.50	ug/l							
p-Isopropyltoluene	ND	0.50	ug/l							
Methylene Chloride	ND	1.0	ug/l							
4-Methyl-2-pentanone (MIBK)	ND	2.5	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	0.50	ug/l							
Naphthalene	ND	2.5	ug/l							
n-Propylbenzene	ND	0.50	ug/l							
Styrene	ND	0.50	ug/l							
1,1,1,2-Tetrachloroethane	ND	0.50	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	ug/l							
Tetrachloroethene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
1,2,3-Trichlorobenzene	ND	1.0	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	ug/l							
1,1,1-Trichloroethane	ND	0.50	ug/l							
1,1,2-Trichloroethane	ND	0.50	ug/l							
Trichloroethene	ND	0.50	ug/l							
Trichlorofluoromethane	ND	0.50	ug/l							
1,2,3-Trichloropropane	ND	1.0	ug/l							
1,2,4-Trimethylbenzene	ND	0.50	ug/l							
1,3,5-Trimethylbenzene	ND	0.50	ug/l							
Vinyl Acetate	ND	1.0	ug/l							
Vinyl chloride	ND	0.50	ug/l							
Xylenes, Total	ND	1.0	ug/l							
Freon 113	ND	2.0	ug/l							
<i>Surrogate: Dibromofluoromethane</i>	22.8		ug/l	25.0		91	70-130			
<i>Surrogate: Toluene-d8</i>	22.6		ug/l	25.0		90	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	22.0		ug/l	25.0		88	70-130			

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009  
Report Number: PUC1113

Sampled: 03/16/11  
Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>LCS Analyzed: 03/22/2011 (11C0791-BS1)</b>										
Acetone	30.6	10	ug/l	25.0		122	30-150			VI
Benzene	20.1	0.50	ug/l	25.0		81	70-130			
Bromobenzene	21.1	0.50	ug/l	25.0		85	70-130			
Bromochloromethane	20.9	0.50	ug/l	25.0		84	70-130			
Bromodichloromethane	21.2	0.50	ug/l	25.0		85	70-130			
Bromoform	22.1	1.0	ug/l	25.0		89	67-122			
Bromomethane	20.8	1.0	ug/l	25.0		83	64-132			
2-Butanone (MEK)	25.6	2.5	ug/l	25.0		103	48-150			
n-Butylbenzene	22.0	0.50	ug/l	25.0		88	70-130			
sec-Butylbenzene	21.0	0.50	ug/l	25.0		84	70-130			
tert-Butylbenzene	21.0	0.50	ug/l	25.0		84	70-130			
Carbon disulfide	29.0	0.50	ug/l	25.0		116	61-126			
Carbon tetrachloride	21.4	0.50	ug/l	25.0		86	70-130			
Chlorobenzene	20.7	0.50	ug/l	25.0		83	70-130			
Chloroethane	21.3	1.0	ug/l	25.0		85	69-128			
Chloroform	20.2	0.50	ug/l	25.0		81	70-130			
Chloromethane	17.5	1.0	ug/l	25.0		70	56-131			
2-Chlorotoluene	20.4	0.50	ug/l	25.0		82	70-130			
4-Chlorotoluene	21.3	0.50	ug/l	25.0		85	70-130			
Dibromochloromethane	21.7	0.50	ug/l	25.0		87	70-130			
1,2-Dibromo-3-chloropropane	21.4	2.5	ug/l	25.0		86	63-129			
1,2-Dibromoethane (EDB)	21.3	0.50	ug/l	25.0		85	70-130			
Dibromomethane	21.1	0.50	ug/l	25.0		84	70-130			
1,2-Dichlorobenzene	20.8	0.50	ug/l	25.0		83	70-130			
1,3-Dichlorobenzene	20.9	0.50	ug/l	25.0		84	70-130			
1,4-Dichlorobenzene	20.9	0.50	ug/l	25.0		83	70-130			
Dichlorodifluoromethane	20.6	0.50	ug/l	25.0		82	42-150			
1,1-Dichloroethane	20.6	0.50	ug/l	25.0		82	70-130			
1,2-Dichloroethane	20.8	0.50	ug/l	25.0		83	72-133			
1,1-Dichloroethene	25.7	0.50	ug/l	25.0		103	70-130			
cis-1,2-Dichloroethene	19.9	0.50	ug/l	25.0		79	70-130			
trans-1,2-Dichloroethene	21.1	0.50	ug/l	25.0		84	70-130			
1,2-Dichloropropane	20.7	0.50	ug/l	25.0		83	70-130			
1,3-Dichloropropane	20.9	0.50	ug/l	25.0		84	70-130			
2,2-Dichloropropane	21.0	1.0	ug/l	25.0		84	70-130			

TestAmerica Phoenix

Kylie Emily  
Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0791 Extracted: 03/22/11</b>										
<b>LCS Analyzed: 03/22/2011 (11C0791-BS1)</b>										
1,1-Dichloropropene	21.0	0.50	ug/l	25.0		84	70-130			
cis-1,3-Dichloropropene	21.4	0.50	ug/l	25.0		86	70-130			
trans-1,3-Dichloropropene	22.4	0.50	ug/l	25.0		89	70-130			
Ethylbenzene	20.7	0.50	ug/l	25.0		83	70-130			
Hexachlorobutadiene	22.0	1.0	ug/l	25.0		88	70-130			
2-Hexanone	24.6	2.5	ug/l	25.0		98	44-150			
Iodomethane	38.3	2.5	ug/l	25.0		153	58-138			L3
Isopropylbenzene	22.9	0.50	ug/l	25.0		92	70-130			
p-Isopropyltoluene	21.9	0.50	ug/l	25.0		88	70-130			
Methylene Chloride	24.7	1.0	ug/l	25.0		99	70-130			
4-Methyl-2-pentanone (MIBK)	23.5	2.5	ug/l	25.0		94	61-142			
Methyl-tert-butyl Ether (MTBE)	20.0	0.50	ug/l	25.0		80	70-130			
Naphthalene	24.0	2.5	ug/l	25.0		96	65-129			
n-Propylbenzene	21.8	0.50	ug/l	25.0		87	70-130			
Styrene	21.6	0.50	ug/l	25.0		86	70-130			
1,1,1,2-Tetrachloroethane	20.8	0.50	ug/l	25.0		83	70-130			
1,1,2,2-Tetrachloroethane	21.4	0.50	ug/l	25.0		86	70-130			
Tetrachloroethene	20.8	0.50	ug/l	25.0		83	70-130			
Toluene	20.2	0.50	ug/l	25.0		81	70-130			
1,2,3-Trichlorobenzene	23.8	1.0	ug/l	25.0		95	70-130			
1,2,4-Trichlorobenzene	23.8	1.0	ug/l	25.0		95	70-130			
1,1,1-Trichloroethane	20.9	0.50	ug/l	25.0		84	70-130			
1,1,2-Trichloroethane	21.2	0.50	ug/l	25.0		85	70-130			
Trichloroethene	20.7	0.50	ug/l	25.0		83	70-130			
Trichlorofluoromethane	23.8	0.50	ug/l	25.0		95	78-149			
1,2,3-Trichloropropane	21.8	1.0	ug/l	25.0		87	70-130			
1,2,4-Trimethylbenzene	21.9	0.50	ug/l	25.0		88	70-130			
1,3,5-Trimethylbenzene	21.4	0.50	ug/l	25.0		86	70-130			
Vinyl Acetate	26.4	1.0	ug/l	25.0		105	57-149			
Vinyl chloride	21.0	0.50	ug/l	25.0		84	66-134			
Xylenes, Total	41.1	1.0	ug/l	50.0		82	70-130			
Freon 113	24.5	2.0	ug/l	25.0		98	63-136			
Surrogate: Dibromoiodomethane	23.2		ug/l	25.0		93	70-130			
Surrogate: Toluene-d8	22.6		ug/l	25.0		90	70-130			
Surrogate: 4-Bromoiodobenzene	22.2		ug/l	25.0		89	70-130			

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

## VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>LCS Dup Analyzed: 03/22/2011 (11C0791-BSD1)</b>										
Acetone	28.4	10	ug/l	25.0	113	30-150	7	35		VI
Benzene	20.0	0.50	ug/l	25.0	80	70-130	0.7	20		
Bromobenzene	22.0	0.50	ug/l	25.0	88	70-130	4	20		
Bromochloromethane	20.8	0.50	ug/l	25.0	83	70-130	0.5	20		
Bromodichloromethane	21.0	0.50	ug/l	25.0	84	70-130	0.9	20		
Bromoform	23.0	1.0	ug/l	25.0	92	67-122	4	20		
Bromomethane	18.3	1.0	ug/l	25.0	73	64-132	13	20		
2-Butanone (MEK)	23.3	2.5	ug/l	25.0	93	48-150	9	33		
n-Butylbenzene	22.0	0.50	ug/l	25.0	88	70-130	0.3	20		
sec-Butylbenzene	21.0	0.50	ug/l	25.0	84	70-130	0.1	20		
tert-Butylbenzene	21.3	0.50	ug/l	25.0	85	70-130	1	20		
Carbon disulfide	23.5	0.50	ug/l	25.0	94	61-126	21	20		R6
Carbon tetrachloride	21.2	0.50	ug/l	25.0	85	70-130	1	20		
Chlorobenzene	20.0	0.50	ug/l	25.0	80	70-130	3	20		
Chloroethane	19.9	1.0	ug/l	25.0	79	69-128	7	20		
Chloroform	19.6	0.50	ug/l	25.0	78	70-130	3	20		
Chloromethane	16.5	1.0	ug/l	25.0	66	56-131	6	20		
2-Chlorotoluene	20.6	0.50	ug/l	25.0	82	70-130	0.8	20		
4-Chlorotoluene	21.4	0.50	ug/l	25.0	86	70-130	0.5	20		
Dibromochloromethane	20.8	0.50	ug/l	25.0	83	70-130	4	20		
1,2-Dibromo-3-chloropropane	22.4	2.5	ug/l	25.0	90	63-129	4	25		
1,2-Dibromoethane (EDB)	20.8	0.50	ug/l	25.0	83	70-130	2	20		
Dibromomethane	21.7	0.50	ug/l	25.0	87	70-130	3	20		
1,2-Dichlorobenzene	21.2	0.50	ug/l	25.0	85	70-130	2	20		
1,3-Dichlorobenzene	21.2	0.50	ug/l	25.0	85	70-130	1	20		
1,4-Dichlorobenzene	21.4	0.50	ug/l	25.0	85	70-130	2	20		
Dichlorodifluoromethane	19.2	0.50	ug/l	25.0	77	42-150	7	20		
1,1-Dichloroethane	20.0	0.50	ug/l	25.0	80	70-130	3	20		
1,2-Dichloroethane	20.2	0.50	ug/l	25.0	81	72-133	3	20		
1,1-Dichloroethene	20.0	0.50	ug/l	25.0	80	70-130	25	20		R6
cis-1,2-Dichloroethene	19.5	0.50	ug/l	25.0	78	70-130	2	20		
trans-1,2-Dichloroethene	20.3	0.50	ug/l	25.0	81	70-130	4	20		
1,2-Dichloropropane	21.0	0.50	ug/l	25.0	84	70-130	1	20		
1,3-Dichloropropane	20.8	0.50	ug/l	25.0	83	70-130	0.2	20		
2,2-Dichloropropane	20.3	1.0	ug/l	25.0	81	70-130	3	20		

## TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0791 Extracted: 03/22/11</u></b>										
<b>LCS Dup Analyzed: 03/22/2011 (11C0791-BSD1)</b>										
1,1-Dichloropropene	20.9	0.50	ug/l	25.0	84	70-130	0.5	20		
cis-1,3-Dichloropropene	21.2	0.50	ug/l	25.0	85	70-130	0.9	20		
trans-1,3-Dichloropropene	21.7	0.50	ug/l	25.0	87	70-130	3	20		
Ethylbenzene	20.0	0.50	ug/l	25.0	80	70-130	3	20		
Hexachlorobutadiene	22.4	1.0	ug/l	25.0	90	70-130	2	20		
2-Hexanone	23.2	2.5	ug/l	25.0	93	44-150	6	31		
Iodomethane	24.8	2.5	ug/l	25.0	99	58-138	43	25		RI
Isopropylbenzene	23.3	0.50	ug/l	25.0	93	70-130	2	20		
p-Isopropyltoluene	21.9	0.50	ug/l	25.0	88	70-130	0.05	20		
Methylene Chloride	19.9	1.0	ug/l	25.0	80	70-130	22	20		R6
4-Methyl-2-pentanone (MIBK)	23.4	2.5	ug/l	25.0	94	61-142	0.4	22		
Methyl-tert-butyl Ether (MTBE)	20.1	0.50	ug/l	25.0	80	70-130	0.3	20		
Naphthalene	24.0	2.5	ug/l	25.0	96	65-129	0.1	20		
n-Propylbenzene	21.8	0.50	ug/l	25.0	87	70-130	0.2	20		
Styrene	21.4	0.50	ug/l	25.0	86	70-130	0.9	20		
1,1,1,2-Tetrachloroethane	20.5	0.50	ug/l	25.0	82	70-130	2	20		
1,1,2,2-Tetrachloroethane	21.9	0.50	ug/l	25.0	88	70-130	2	20		
Tetrachloroethene	20.3	0.50	ug/l	25.0	81	70-130	2	20		
Toluene	20.1	0.50	ug/l	25.0	80	70-130	0.8	20		
1,2,3-Trichlorobenzene	23.3	1.0	ug/l	25.0	93	70-130	2	20		
1,2,4-Trichlorobenzene	24.2	1.0	ug/l	25.0	97	70-130	2	20		
1,1,1-Trichloroethane	20.7	0.50	ug/l	25.0	83	70-130	1	20		
1,1,2-Trichloroethane	20.6	0.50	ug/l	25.0	82	70-130	3	20		
Trichloroethene	20.2	0.50	ug/l	25.0	81	70-130	3	20		
Trichlorofluoromethane	22.6	0.50	ug/l	25.0	90	78-149	5	20		
1,2,3-Trichloropropane	22.6	1.0	ug/l	25.0	90	70-130	4	20		
1,2,4-Trimethylbenzene	21.7	0.50	ug/l	25.0	87	70-130	1	20		
1,3,5-Trimethylbenzene	21.5	0.50	ug/l	25.0	86	70-130	0.3	20		
Vinyl Acetate	26.1	1.0	ug/l	25.0	104	57-149	1	21		
Vinyl chloride	19.3	0.50	ug/l	25.0	77	66-134	9	20		
Xylenes, Total	39.6	1.0	ug/l	50.0	79	70-130	3	20		
Freon 113	19.3	2.0	ug/l	25.0	77	63-136	24	20		R6
<i>Surrogate: Dibromofluoromethane</i>	23.0		ug/l	25.0	92	70-130				
<i>Surrogate: Toluene-d8</i>	22.4		ug/l	25.0	90	70-130				
<i>Surrogate: 4-Bromofluorobenzene</i>	22.2		ug/l	25.0	89	70-130				

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0791 Extracted: 03/22/11</b>										
<b>Matrix Spike Analyzed: 03/22/2011 (11C0791-MS1)</b>					<b>Source: PUC0982-02</b>					
Acetone	27.2	10	ug/l	25.0	ND	109	10-150			VI
Benzene	19.8	0.50	ug/l	25.0	ND	79	70-130			
Bromobenzene	22.0	0.50	ug/l	25.0	ND	88	70-130			
Bromochloromethane	20.5	0.50	ug/l	25.0	ND	82	70-130			
Bromodichloromethane	20.6	0.50	ug/l	25.0	ND	83	70-130			
Bromoform	22.7	1.0	ug/l	25.0	ND	91	62-126			
Bromomethane	18.1	1.0	ug/l	25.0	ND	72	55-136			
2-Butanone (MEK)	23.7	2.5	ug/l	25.0	ND	95	22-150			
n-Butylbenzene	22.2	0.50	ug/l	25.0	ND	89	70-130			
sec-Butylbenzene	21.2	0.50	ug/l	25.0	ND	85	70-130			
tert-Butylbenzene	21.5	0.50	ug/l	25.0	ND	86	70-130			
Carbon disulfide	23.5	0.50	ug/l	25.0	ND	94	56-132			
Carbon tetrachloride	21.5	0.50	ug/l	25.0	ND	86	76-131			
Chlorobenzene	20.6	0.50	ug/l	25.0	ND	82	70-130			
Chloroethane	20.1	1.0	ug/l	25.0	ND	80	67-134			
Chloroform	21.4	0.50	ug/l	25.0	1.44	80	70-130			
Chloromethane	17.4	1.0	ug/l	25.0	ND	70	50-135			
2-Chlorotoluene	20.7	0.50	ug/l	25.0	ND	83	70-130			
4-Chlorotoluene	21.9	0.50	ug/l	25.0	ND	88	70-130			
Dibromochloromethane	21.7	0.50	ug/l	25.0	ND	87	70-130			
1,2-Dibromo-3-chloropropane	21.6	2.5	ug/l	25.0	ND	86	60-135			
1,2-Dibromoethane (EDB)	21.1	0.50	ug/l	25.0	ND	84	70-130			
Dibromomethane	21.5	0.50	ug/l	25.0	ND	86	70-130			
1,2-Dichlorobenzene	21.6	0.50	ug/l	25.0	ND	86	70-130			
1,3-Dichlorobenzene	21.3	0.50	ug/l	25.0	ND	85	70-130			
1,4-Dichlorobenzene	21.8	0.50	ug/l	25.0	ND	87	70-130			
Dichlorodifluoromethane	19.0	0.50	ug/l	25.0	ND	76	36-150			
1,1-Dichloroethane	21.6	0.50	ug/l	25.0	1.90	79	70-130			
1,2-Dichloroethane	20.4	0.50	ug/l	25.0	ND	81	68-143			
1,1-Dichloroethene	22.4	0.50	ug/l	25.0	2.71	79	70-130			
cis-1,2-Dichloroethene	21.4	0.50	ug/l	25.0	1.96	78	70-130			
trans-1,2-Dichloroethene	20.2	0.50	ug/l	25.0	ND	81	70-130			
1,2-Dichloropropane	21.2	0.50	ug/l	25.0	ND	85	70-130			
1,3-Dichloropropane	20.6	0.50	ug/l	25.0	ND	83	70-130			
2,2-Dichloropropane	19.9	1.0	ug/l	25.0	ND	79	66-130			

#### TestAmerica Phoenix

Kylie Emily  
Project Manager

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Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

### METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0791 Extracted: 03/22/11</u></b>										
<b>Matrix Spike Analyzed: 03/22/2011 (11C0791-MS1)</b>										
										<b>Source: PUC0982-02</b>
1,1-Dichloropropene	21.2	0.50	ug/l	25.0	ND	85	70-130			
cis-1,3-Dichloropropene	20.9	0.50	ug/l	25.0	ND	83	70-130			
trans-1,3-Dichloropropene	21.8	0.50	ug/l	25.0	ND	87	71-132			
Ethylbenzene	20.6	0.50	ug/l	25.0	ND	83	70-130			
Hexachlorobutadiene	23.0	1.0	ug/l	25.0	ND	92	66-129			
2-Hexanone	24.2	2.5	ug/l	25.0	ND	97	18-150			
Iodomethane	24.2	2.5	ug/l	25.0	ND	97	47-141			
Isopropylbenzene	23.2	0.50	ug/l	25.0	ND	93	78-137			
p-Isopropyltoluene	22.2	0.50	ug/l	25.0	ND	89	70-130			
Methylene Chloride	19.8	1.0	ug/l	25.0	ND	79	74-132			
4-Methyl-2-pentanone (MIBK)	23.1	2.5	ug/l	25.0	ND	92	56-145			
Methyl-tert-butyl Ether (MTBE)	19.9	0.50	ug/l	25.0	0.140	79	67-138			
Naphthalene	22.8	2.5	ug/l	25.0	ND	91	54-135			
n-Propylbenzene	22.0	0.50	ug/l	25.0	ND	88	70-130			
Styrene	19.9	0.50	ug/l	25.0	ND	80	51-123			
1,1,1,2-Tetrachloroethane	20.9	0.50	ug/l	25.0	ND	84	70-130			
1,1,2,2-Tetrachloroethane	22.1	0.50	ug/l	25.0	ND	88	69-133			
Tetrachloroethene	21.2	0.50	ug/l	25.0	0.430	83	70-130			
Toluene	20.1	0.50	ug/l	25.0	ND	80	70-130			
1,2,3-Trichlorobenzene	23.4	1.0	ug/l	25.0	ND	94	70-130			
1,2,4-Trichlorobenzene	23.4	1.0	ug/l	25.0	ND	94	66-126			
1,1,1-Trichloroethane	20.7	0.50	ug/l	25.0	ND	83	76-132			
1,1,2-Trichloroethane	21.2	0.50	ug/l	25.0	ND	85	70-130			
Trichloroethene	28.0	0.50	ug/l	25.0	7.93	80	70-130			
Trichlorofluoromethane	23.9	0.50	ug/l	25.0	0.130	95	74-150			
1,2,3-Trichloropropane	22.1	1.0	ug/l	25.0	ND	88	70-130			
1,2,4-Trimethylbenzene	21.7	0.50	ug/l	25.0	ND	87	70-130			
1,3,5-Trimethylbenzene	21.8	0.50	ug/l	25.0	ND	87	61-138			
Vinyl Acetate	24.4	1.0	ug/l	25.0	ND	98	50-150			
Vinyl chloride	19.0	0.50	ug/l	25.0	ND	76	58-139			
Xylenes, Total	40.7	1.0	ug/l	50.0	ND	81	70-130			
Freon 113	19.4	2.0	ug/l	25.0	ND	78	56-148			
Surrogate: Dibromofluoromethane	23.6		ug/l	25.0		94	70-130			
Surrogate: Toluene-d8	22.9		ug/l	25.0		92	70-130			
Surrogate: 4-Bromofluorobenzene	22.8		ug/l	25.0		91	70-130			

**TestAmerica Phoenix**

 Kylie Emily  
 Project Manager

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PUC1113 &lt; 18 of 262

Environmental Resources Management Inc.-West  
 7272 E. Indian School Rd. Ste 100  
 Scottsdale, AZ 85251  
 Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11C0791 Extracted: 03/22/11</b>										
<b>Matrix Spike Dup Analyzed: 03/22/2011 (11C0791-MSD1)</b>										
Acetone	25.0	10	ug/l	25.0	ND	100	10-150	8	35	VI
Benzene	19.9	0.50	ug/l	25.0	ND	80	70-130	0.4	20	
Bromobenzene	22.0	0.50	ug/l	25.0	ND	88	70-130	0.05	20	
Bromochloromethane	20.9	0.50	ug/l	25.0	ND	83	70-130	2	20	
Bromodichloromethane	20.8	0.50	ug/l	25.0	ND	83	70-130	0.8	20	
Bromoform	22.4	1.0	ug/l	25.0	ND	89	62-126	2	20	
Bromomethane	18.4	1.0	ug/l	25.0	ND	73	55-136	1	24	
2-Butanone (MEK)	23.1	2.5	ug/l	25.0	ND	92	22-150	2	31	
n-Butylbenzene	21.9	0.50	ug/l	25.0	ND	88	70-130	1	20	
sec-Butylbenzene	21.1	0.50	ug/l	25.0	ND	84	70-130	0.6	20	
tert-Butylbenzene	21.0	0.50	ug/l	25.0	ND	84	70-130	2	20	
Carbon disulfide	23.0	0.50	ug/l	25.0	ND	92	56-132	2	20	
Carbon tetrachloride	21.0	0.50	ug/l	25.0	ND	84	76-131	2	20	
Chlorobenzene	20.4	0.50	ug/l	25.0	ND	82	70-130	0.9	20	
Chloroethane	19.9	1.0	ug/l	25.0	ND	80	67-134	0.7	20	
Chloroform	21.4	0.50	ug/l	25.0	1.44	80	70-130	0.05	20	
Chloromethane	18.1	1.0	ug/l	25.0	ND	72	50-135	4	20	
2-Chlorotoluene	20.6	0.50	ug/l	25.0	ND	83	70-130	0.3	20	
4-Chlorotoluene	21.6	0.50	ug/l	25.0	ND	86	70-130	1	20	
Dibromochloromethane	21.7	0.50	ug/l	25.0	ND	87	70-130	0.09	20	
1,2-Dibromo-3-chloropropane	22.9	2.5	ug/l	25.0	ND	91	60-135	6	29	
1,2-Dibromoethane (EDB)	22.0	0.50	ug/l	25.0	ND	88	70-130	4	20	
Dibromomethane	21.4	0.50	ug/l	25.0	ND	86	70-130	0.5	20	
1,2-Dichlorobenzene	21.4	0.50	ug/l	25.0	ND	85	70-130	1	20	
1,3-Dichlorobenzene	20.9	0.50	ug/l	25.0	ND	84	70-130	2	20	
1,4-Dichlorobenzene	21.2	0.50	ug/l	25.0	ND	85	70-130	3	20	
Dichlorodifluoromethane	19.0	0.50	ug/l	25.0	ND	76	36-150	0.05	22	
1,1-Dichloroethane	21.7	0.50	ug/l	25.0	1.90	79	70-130	0.6	20	
1,2-Dichloroethane	20.3	0.50	ug/l	25.0	ND	81	68-143	0.2	20	
1,1-Dichloroethene	22.3	0.50	ug/l	25.0	2.71	78	70-130	0.7	20	
cis-1,2-Dichloroethene	21.1	0.50	ug/l	25.0	1.96	77	70-130	1	20	
trans-1,2-Dichloroethene	20.3	0.50	ug/l	25.0	ND	81	70-130	0.2	20	
1,2-Dichloropropane	20.8	0.50	ug/l	25.0	ND	83	70-130	2	20	
1,3-Dichloropropane	21.1	0.50	ug/l	25.0	ND	84	70-130	2	20	
2,2-Dichloropropane	19.5	1.0	ug/l	25.0	ND	78	66-130	2	20	

#### TestAmerica Phoenix

Kylie Emily  
 Project Manager

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Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 11C0791 Extracted: 03/22/11</u>										
<b>Matrix Spike Dup Analyzed: 03/22/2011 (11C0791-MSD1)</b>										
<b>Source: PUC0982-02</b>										
1,1-Dichloropropene	20.6	0.50	ug/l	25.0	ND	82	70-130	3	20	
cis-1,3-Dichloropropene	20.6	0.50	ug/l	25.0	ND	82	70-130	1	20	
trans-1,3-Dichloropropene	21.8	0.50	ug/l	25.0	ND	87	71-132	0.2	20	
Ethylbenzene	20.5	0.50	ug/l	25.0	ND	82	70-130	0.7	20	
Hexachlorobutadiene	21.9	1.0	ug/l	25.0	ND	88	66-129	5	21	
2-Hexanone	25.1	2.5	ug/l	25.0	ND	100	18-150	3	25	
Iodomethane	24.5	2.5	ug/l	25.0	ND	98	47-141	0.9	29	
Isopropylbenzene	23.1	0.50	ug/l	25.0	ND	92	78-137	0.3	20	
p-Isopropyltoluene	21.8	0.50	ug/l	25.0	ND	87	70-130	2	20	
Methylene Chloride	20.2	1.0	ug/l	25.0	ND	81	74-132	1	20	
4-Methyl-2-pentanone (MIBK)	22.9	2.5	ug/l	25.0	ND	92	56-145	0.9	26	
Methyl-tert-butyl Ether (MTBE)	20.3	0.50	ug/l	25.0	0.140	81	67-138	2	21	
Naphthalene	24.5	2.5	ug/l	25.0	ND	98	54-135	7	33	
n-Propylbenzene	21.9	0.50	ug/l	25.0	ND	88	70-130	0.3	20	
Styrene	19.7	0.50	ug/l	25.0	ND	79	51-123	1	21	
1,1,1,2-Tetrachloroethane	20.5	0.50	ug/l	25.0	ND	82	70-130	2	20	
1,1,2,2-Tetrachloroethane	22.5	0.50	ug/l	25.0	ND	90	69-133	2	20	
Tetrachloroethene	21.1	0.50	ug/l	25.0	0.430	83	70-130	0.5	20	
Toluene	20.1	0.50	ug/l	25.0	ND	81	70-130	0.3	20	
1,2,3-Trichlorobenzene	24.0	1.0	ug/l	25.0	ND	96	70-130	2	20	
1,2,4-Trichlorobenzene	24.2	1.0	ug/l	25.0	ND	97	66-126	3	20	
1,1,1-Trichloroethane	20.4	0.50	ug/l	25.0	ND	82	76-132	1	20	
1,1,2-Trichloroethane	21.3	0.50	ug/l	25.0	ND	85	70-130	0.3	20	
Trichloroethene	28.2	0.50	ug/l	25.0	7.93	81	70-130	0.4	20	
Trichlorofluoromethane	23.6	0.50	ug/l	25.0	0.130	94	74-150	1	20	
1,2,3-Trichloropropane	22.5	1.0	ug/l	25.0	ND	90	70-130	2	20	
1,2,4-Trimethylbenzene	21.5	0.50	ug/l	25.0	ND	86	70-130	0.7	20	
1,3,5-Trimethylbenzene	21.2	0.50	ug/l	25.0	ND	85	61-138	3	33	
Vinyl Acetate	24.1	1.0	ug/l	25.0	ND	96	50-150	1	23	
Vinyl chloride	19.2	0.50	ug/l	25.0	ND	77	58-139	1	21	
Xylenes, Total	40.4	1.0	ug/l	50.0	ND	81	70-130	0.9	20	
Freon 113	19.2	2.0	ug/l	25.0	ND	77	56-148	1	22	
<i>Surrogate: Dibromofluoromethane</i>	23.0		ug/l	25.0		92	70-130			
<i>Surrogate: Toluene-d8</i>	22.4		ug/l	25.0		90	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	23.0		ug/l	25.0		92	70-130			

TestAmerica Phoenix

Kylie Emily  
Project Manager

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20 of 262  
PUC1113 <1>

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd, Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## METHOD BLANK/QC DATA

### 1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 11C0675 Extracted: 03/17/11</u></b>										
<b>Blank Analyzed: 03/18/2011 (11C0675-BLK1)</b>										
1,4-Dioxane	ND	1.0	ug/l							
Surrogate: 1,4-Dioxane-d8	14.8		ug/l	20.0		74	20-105			
Surrogate: Nitrobenzene-d5	16.2		ug/l	20.0		81	30-130			
<b>LCS Analyzed: 03/18/2011 (11C0675-BS1)</b>										
1,4-Dioxane	20.6	1.0	ug/l	20.0		103	85-115			Q8
Surrogate: 1,4-Dioxane-d8	17.5		ug/l	20.0		88	30-105			
Surrogate: Nitrobenzene-d5	19.6		ug/l	20.0		98	35-140			
<b>LCS Dup Analyzed: 03/18/2011 (11C0675-BSD1)</b>										
1,4-Dioxane	20.6	1.0	ug/l	20.0		103	85-115	0	20	Q8
Surrogate: 1,4-Dioxane-d8	14.1		ug/l	20.0		71	30-105			
Surrogate: Nitrobenzene-d5	16.9		ug/l	20.0		85	35-140			

### TestAmerica Phoenix

Kylie Emily  
Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009  
Report Number: PUC1113

Sampled: 03/16/11  
Received: 03/16/11

## DATA QUALIFIERS AND DEFINITIONS

- L3** The associated blank spike recovery was above method acceptance limits.
- Q8** Insufficient sample received to meet method QC requirements. Batch QC requirements satisfy ADEQ policies 0154.000 and 0155.000.
- R1** The RPD/RSD exceeded the method acceptance limit.
- R6** LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
- V1** CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

### TestAmerica Phoenix

Kylie Emily  
Project Manager

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PUC1113 <1> 22 of 262

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Environmental Resources Management Inc.-West  
7272 E. Indian School Rd. Ste 100  
Scottsdale, AZ 85251  
Attention: Jason Hilker

Project ID: 0096498.009

Report Number: PUC1113

Sampled: 03/16/11

Received: 03/16/11

## Certification Summary

### TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8260B	Water	X	X
SW8270C	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at [www.testamericainc.com](http://www.testamericainc.com)*

### TestAmerica Phoenix

Kylie Emily  
Project Manager

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PUC1113 <1> 23 of 262



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

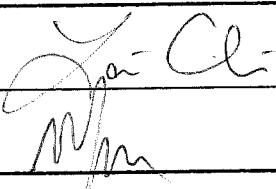
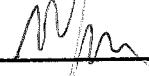
METHOD: 8260B

DATE: 03/17/2011

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department:	Volatiles	Method:	8260B	Instrument #:	GCMS 7
Analyst:	LC	Analysis Date: 03/17/11			
<b>Method name saved in the file:</b>					
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, <u>9</u> , 10, 11, 12 2. Did the calibration curve pass the method criteria? <u>Y</u> N 3. Were any points of the curve removed or replaced? Y <u>N</u> If yes, what points were removed or replaced: lowest middle highest Why?					
4. Were any individual analyte points removed? If yes, what points were removed or replaced: <u>Y</u> N lowest middle highest List of the analytes: Acetone, Methylene chloride, MEK, 2-EVE, MIBK, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene Why? LIRL, Curve Fit					
5. Circle the calibration model used (you may circle one or more) <input checked="" type="checkbox"/> Average Response Factor <input checked="" type="checkbox"/> Linear Regression / not forced through zero / simple linear <input type="checkbox"/> Equal weighting <input checked="" type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration <input type="checkbox"/> Linear Regression / forced through zero <input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration					
6. Did the calibration meet the Good Documentation Practices SOP requirements: <u>Y</u> N					

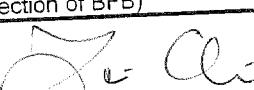
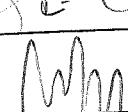
Review Signatures:	Analyst:		Date:	03/18/11
	Reviewer:		Date:	3/18/11

Attachment 2  
**ANALYTICAL DATA REVIEW CHECKLIST**

 SOP PE-VOA-011 R.0  
 VOCs in Vapor [ Method No. 8260B AZ Method ]

Analysis Date:	Description	Yes	No	NA <sup>1</sup>
03/17/11	1. BFB (50 ng or less): Verify meets criteria every 12 hours	/		
	2. Initial Calibration Curve (5 levels)	/		
	- Date of Initial Calibration: 03/17/11.W	/		
	- SPCCs must met Min. RF	/		
	- CCCs ≤ 30% RPD	/		
	- All other compounds ≤ 15% RSD or use curve	/		
	- Comments:	/		
	- Second source within historical limits	/	/	(1)
	- Tertiary source within 50 – 150% recovery	/		
	3. Continuing Calibration Check (every 12 hours)	/		
	- SPCCs must met Min. RF	/		
	- CCCs ≤ 20% D	/		
	- IS RT ± 30 secs	/		
	- IS area -50% to +100%	/		
	- All CCVs for reported analytes within historical limits	/		
	4. Method Blank	/		
	- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/		
	- All compounds of interest must be < Reporting Limit	/		
	5. Laboratory Control Samples (LCS/LCSD)			N/A
	- Must be analyzed per 20 samples/per matrix/per batch			
	- LCS/LCSD recoveries within historical limits			
	- RPD ≤ 25%			
	- Surrogates within historical limits			
	6. Samples			
	- Analyzed within 72 hours of sampling			
	- IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL			
	- Surrogate recoveries within historical limits			
	- Sample Duplicate performed every 10 samples			
Comments: ① Bromomethane - N1 - See CAR				

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: 	Date: 03/18/11
	Reviewer: 	Date: 3/18/11

1) NA: Not Applicable

TestAmerica  
Phoenix

Instrument ID	GCMS 7
Date:	03/17/11
Analyst	LC
Method(s)	8260B
50 ppm Cal. Std.	P01525
2.5 ppm Cal. Std.	P01528
500 / 250 ppm EtOH/TBA Cal. Std.	n/a
50 / 25 ppm EtOH/TBA Cal. Std.	n/a
50 ppm SS Std.	P01537
500 / 250 ppm EtOH/TBA SS Std.	n/a

3<sup>rd</sup> Gas: PT06459

This table outlines the initial calibration preparation for GCMS 7, GCMS 4 and GCMS 2.

Calibration Number	FINAL CONCENTRATIONS (ppb)				SPIKE AMOUNTS ( $\mu$ L) in 10 mL final volume				
	ISTD / TBA-d9	VOC	Ethanol	TBA	50ppm Ethanol / 25ppm TBA	2.5ppm VOC Cal. Std.	500ppm Ethanol / 250ppm TBA	50ppm VOC Cal. Std.	
1	25/200	0.5	5	2.5	1	2			
2	25/200	1.0	10	5	2	4			
3	25/200	2.0	20	10	4	8			
4	25/200	5.0	50	25			1	1	
5	25/200	10	100	50			2	2	
6*	25/200	25	250	125			5	5	
7	25/200	50	750	375			10	10	
8	25/200	100	1000	500			20	20	
9	25/200	200	2000	1000			40	40	

\*SS/ICVs are at the same level as Calibration point #6 and prepared the same way.

Reviewed By: \_\_\_\_\_

Date: 3/18/11

VC 03/18/11

Response Factor Report GCMS7

Method : C:\HPCHEM\1 GCMS\WLM.R055\GC1.D  
Title : USP Method 826.0B  
Last update : Thu Mar 17 14:08:36 2011  
Comments via : Initial Calibration

Calibration File  
 $\begin{array}{ll} 0.5 & =03171106.D \\ 25.0 & =03171111.D \end{array}$   
 $\begin{array}{ll} 1.0 & =03171107.D \\ 50.0 & =03171112.D \end{array}$   
 $\begin{array}{ll} 2.0 & =03171108.D \\ 100. & =03171113.D \end{array}$   
 $\begin{array}{ll} 5.0 & =03171114.D \\ 200. & =03171115.D \end{array}$   
 $\begin{array}{ll} 10.0 & =03171116.D \\ 500. & =03171117.D \end{array}$   
 $\begin{array}{ll} 25.0 & =03171118.D \\ 100. & =03171119.D \end{array}$

Table 1. Compound 1 and its analogues.

— 1 —

		-STD-								
I	Pentafluorobenzene	1.278	1.131	1.176	1.343	1.199	1.217	1.132	1.112	1.041
	Dichlorodifluoromethane	1.965	1.722	1.705	2.115	2.031	1.963	1.991	2.043	2.039
TMP	Chloromethane	1.791	1.789	1.668	1.817	1.677	1.725	1.728	1.753	1.700
TMC	Vinyl chloride	0.920	0.793	0.521	0.711	0.801	0.859	0.858	0.916	0.940
TM	Bromomethane	1.005	1.039	0.879	0.958	0.956	0.913	0.871	0.834	0.839
TM	Chloroethane	1.302	1.243	1.207	1.370	1.280	1.303	0.986	0.997	1.191
TM	Trichlorofluoromethane	0.379	0.589	0.400	0.584	0.546	0.597	0.565	0.561	0.556
T	Acetone	0.860	0.836	0.621	0.721	0.703	0.678	0.638	0.643	0.644
T	Iodomethane	1.032	0.802	0.901	0.831	0.804	0.764	0.757	0.744	0.830
TMC	1,1-Dichloroethene	1.047	0.958	0.765	0.861	0.786	0.813	0.761	0.768	0.755
TM	Methylene chloride	2.991	2.718	2.262	2.705	2.441	2.445	2.339	2.359	2.318
Freon	113	0.822	0.931	0.715	0.835	0.766	0.772	0.720	0.735	0.725
T	Carbon disulfide	1.501	1.617	1.243	1.449	1.271	1.308	1.179	1.227	1.204
TM	trans-1,2-Dichloroethene	1.773	1.868	1.535	1.752	1.632	1.610	1.498	1.506	1.474
T	MTBE	1.436	1.510	1.090	1.380	1.226	1.231	1.161	1.181	1.162
TMP	1,1-Dichloroethane	0.915	0.789	0.816	0.898	0.803	0.800	0.745	0.754	0.751
T	Vinyl acetate	0.338	0.306	0.271	0.338	0.314	0.289	0.279	0.273	0.253
T	2-Butanone (MEK)	1.474	1.291	1.359	1.505	1.426	1.329	1.229	1.253	1.222
T	cis-1,2-Dichloroethene	1.151	1.062	1.049	1.207	1.108	1.096	1.056	1.056	1.014
Bromochloromethane	0.873	0.905	0.802	0.893	0.804	0.830	0.757	0.772	0.740	0.629
Chloroform	0.873	0.905	0.802	0.893	0.804	0.830	0.757	0.772	0.740	0.820
2,2-Bichloropropane	0.981	0.938	0.900	1.069	0.997	0.987	0.937	0.942	0.927	0.964
Dibromoform	0.981	0.938	0.900	1.069	0.997	0.987	0.937	0.942	0.927	0.964
S	1,2-Dichloroethane	0.981	0.938	0.900	1.069	0.997	0.987	0.937	0.942	0.927

TM 1,1,1-Trichloroethane

	ISTD		Linear	
I	1,4-Difluorobenzene	0.676	0.609	0.621
T	1,1-Dichloropropene	0.426	0.417	0.414
TM	Carbon tetrachloride	1.854	1.747	1.665
TM	Benzene	0.220	0.217	0.194
T	Dibromomethane	0.525	0.461	0.462
TMC	1,2-Dichloropropane	0.455	0.415	0.412
TM	Trichloroethene	0.507	0.483	0.464
TM	Bromo dichloromethane	0.588	0.595	0.568
T	2-Chlorovinylethyllether	0.588	0.595	0.568

4-Methyl-2-pentanone (MIBK)	0.296	0.223	0.257	0.245	0.246	0.237	0.250	0.244	0.250	0.448
trans-1,3-Dichloropropene	0.429	0.437	0.505	0.482	0.485	0.478	0.470	0.463	0.471	5.22
1,1,2-Trichloroethane	0.230	0.224	0.221	0.244	0.234	0.228	0.218	0.221	0.216	3.97
Toluene-d8	1.506	1.274	1.214	1.274	1.213	1.236	1.199	1.217	1.214	7.60
Toluene	1.070	0.895	0.962	1.017	0.968	0.969	0.963	0.955	0.954	0.973 ✓
4-Bromotoluene	0.535	0.569	0.533	0.642	0.578	0.578	0.552	0.560	0.543	0.566 ✓
Chlorobenzene-d5	0.153	0.215	0.180	0.183	0.192	0.202	0.194	0.189	0.189	10.33
1,1-Dichloropropane	0.294	0.319	0.347	0.331	0.338	0.336	0.340	0.336	0.340	10.04
2-Hexanone	0.421	0.251	0.278	0.321	0.291	0.290	0.283	0.293	0.282	0.284 ✓
Dibromo-chloromethane	0.265	0.416	0.421	0.457	0.454	0.454	0.448	0.448	0.448	6.84
1,2-Dibromoethane	0.491	0.370	0.348	0.372	0.362	0.359	0.370	0.370	0.370	4.86
Tetrachloroethane	0.419	0.127	1.115	1.215	1.160	1.173	1.147	1.185	1.173	5.34
1,1,2-Tetrachloroethane	1.278	2.116	2.077	2.272	2.199	2.221	2.180	2.235	2.188	4.18
Chlorobenzene	2.432	0.710	0.745	0.803	0.758	0.769	0.749	0.770	0.760	2.214 ✓
TMP	0.914	1.044	1.064	1.123	1.265	1.217	1.199	1.239	1.255	7.43
Chlorobenzene	0.914	1.044	1.064	1.123	1.265	1.217	1.199	1.239	1.255	6.94
TMP	0.865	0.741	0.720	0.770	0.734	0.734	0.728	0.747	0.744	5.84
m,p-Xylenes	0.666	0.563	0.532	0.559	0.520	0.531	0.517	0.534	0.509	8.71
Styrene	0.666	0.563	0.532	0.559	0.520	0.531	0.517	0.534	0.509	✓
o-Xylene	0.666	0.563	0.532	0.559	0.520	0.531	0.517	0.534	0.509	✓
4-Bromofluorobenzene	0.346	0.342	0.330	0.398	0.372	0.377	0.377	0.381	0.334	0.362 ✓
4-Chlorobenzene-d4	0.776	0.777	0.741	0.769	0.759	0.732	0.718	0.714	0.603	7.38
TMP	0.119	0.178	0.161	0.182	0.165	0.168	0.160	0.158	0.143	0.159
1,1,2,2-Tetrachloroethane	4.005	3.607	3.797	3.945	4.018	3.966	3.899	3.859	3.357	3.828
1,1,2,3-Tetrachloroethane	0.821	0.849	0.879	0.932	0.930	0.936	0.905	0.898	0.795	0.883
Isopropylbenzene	5.622	5.275	5.271	5.811	5.709	5.635	5.518	5.473	4.873	5.465
Bromobenzene	3.635	3.131	3.065	3.274	3.246	3.176	3.139	2.874	3.202	5.26
n-Propylbenzene	3.455	2.901	3.111	3.329	3.224	3.287	3.194	3.123	2.942	3.174
2-Chlorotoluene	3.482	3.055	3.159	3.421	3.445	3.402	3.291	3.314	3.201	5.61
4-Chlorotoluene	2.867	2.682	2.696	2.874	2.922	2.887	2.853	2.812	2.753	3.07
1,3,5-Trimethylbenzene	3.429	3.228	3.251	3.411	3.407	3.411	3.331	3.302	3.155	3.325
tert-Butylbenzene	4.909	4.685	4.781	4.984	4.889	4.960	4.835	4.770	4.628	4.827
1,2,4-Trimethylbenzene	1.922	1.696	1.781	1.842	1.831	1.832	1.788	1.772	1.732	3.69
sec-Butylbenzene	2.018	1.817	1.769	1.830	1.781	1.799	1.774	1.772	1.748	4.50
1,3-Dichlorobenzene	3.621	3.386	3.554	3.772	3.840	3.866	3.737	3.736	3.694	4.07
1,4-Dichlorobenzene	1.676	1.479	1.524	1.652	1.572	1.593	1.551	1.529	1.565	4.17
p-Isopropyltoluene	4.083	3.836	3.893	4.307	4.176	4.341	4.160	4.146	4.018	4.107
1,2-Dichlorobenzene	0.086	0.086	0.108	0.092	0.106	0.101	0.097	0.096	0.094	0.098#
n-Butylbenzene	0.920	1.036	0.925	1.051	0.955	1.090	1.036	1.068	1.017	1.011
1,2-Dibromo-3-chloropropane	1.322	1.200	1.403	1.267	1.459	1.356	1.419	1.298	1.341	6.41
1,2,4-Trichlorobenzene	0.624	0.630	0.633	0.635	0.661	0.684	0.649	0.662	0.632	3.07
Naphthalene	0.835	0.763	0.778	0.889	0.792	0.905	0.830	0.863	0.763	6.51
Hexa-2-methylbenzene	0.086	0.086	0.108	0.092	0.106	0.101	0.097	0.096	0.094	0.098#

((#)) = Out of Range

卷之二

## Calibration Status Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

#	ID	Conc	ISTD	Path\File
			Conc	
1	0.5	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D
2	1.0	1	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D
3	2.0	2	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D
4	5.0	5	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D
5	10.0	10	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D
6	25.0	25	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D
7	50.0	50	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D
8	100.	100	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D
9	200.	200	25	C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.5	Mar 17 14:03 2011	Mar 17 13:56 2011	17 Mar 2011 9:12 am
2	1.0	Mar 17 14:03 2011	Mar 17 13:57 2011	17 Mar 2011 9:43 am
3	2.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:14 am
4	5.0	Mar 17 14:03 2011	Mar 17 13:59 2011	17 Mar 2011 10:45 am
5	10.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:15 am
6	25.0	Mar 17 14:04 2011	Mar 17 14:00 2011	17 Mar 2011 11:46 am
7	50.0	Mar 17 14:04 2011	Mar 17 14:01 2011	17 Mar 2011 12:17 pm
8	100.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 12:48 pm
9	200.	Mar 17 14:04 2011	Mar 17 14:02 2011	17 Mar 2011 1:19 pm

031711.M                    Thu Mar 17 14:51:31 2011

LC 03/18/11

M

## Compound List Report GCMS7

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 Total Cpnds : 76

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I Pentafluorobenzene	168	10.60	1.000	A	0	A	L
2	T Dichlorodifluoromethane	85	4.60	0.434	A	2	A	B
3	T Chloromethane	50	4.89	0.461	A	1	A	B
4	T Vinyl chloride	62	5.18	0.489	A	1	A	B
5	T Bromomethane	94	5.78	0.545	(L)	1	A	B
6	T Chloroethane	64	5.98	0.564	A	1	A	B
7	T Trichlorofluoromethane	101	6.78	0.639	A	1	A	L
8	T Acetone	43	6.94	0.654	(L)	1	A	L
9	T Iodomethane	142	7.57	0.714	(L)	1	A	B
10	T 1,1-Dichloroethene	96	7.51	0.708	A	2	A	B
11	T Methylene chloride	84	7.71	0.727	A	2	A	B
12	Freon 113	101	7.77	0.733	A	2	A	B
13	T Carbon disulfide	76	8.03	0.757	A	0	A	B
14	T trans-1,2-Dichloroethene	96	8.59	0.810	A	2	A	B
15	T MTBE	73	8.74	0.824	A	1	A	B
16	T 1,1-Dichloroethane	63	8.92	0.841	A	2	A	B
17	T Vinyl acetate	43	9.08	0.857	A	1	A	L
18	T 2-Butanone (MEK)	72	9.47	0.893	(L)	1	A	B
19	T cis-1,2-Dichloroethene	96	9.66	0.911	A	2	A	B
20	T Bromochloromethane	128	9.87	0.931	A	2	A	B
21	T Chloroform	83	9.93	0.936	A	1	A	B
22	T 2,2-Dichloropropane	77	10.04	0.947	A	1	A	B
23	S Dibromofluoromethane	113	10.09	0.951	A	0	A	B
24	T 1,2-Dichloroethane	62	10.78	1.017	A	1	A	B
25	T 1,1,1-Trichloroethane	97	10.91	1.029	A	2	A	B
26	I 1,4-Difluorobenzene	114	11.73	1.000	A	1	A	B
27	T 1,1-Dichloropropene	75	11.15	0.950	A	2	A	B
28	T Carbon tetrachloride	117	11.39	0.971	A	1	A	B
29	T Benzene	78	11.44	0.976	A	1	A	B
30	T Dibromomethane	93	12.17	1.037	A	2	A	B
31	T 1,2-Dichloropropene	63	12.21	1.041	A	1	A	B
32	T Trichloroethene	95	12.27	1.046	A	2	A	B
33	T Bromodichloromethane	83	12.33	1.051	A	2	A	B
34	T 2-Chlorovinylethylether	63	12.86	1.097	(L)	1	A	B
35	T cis-1,3-Dichloropropene	75	13.16	1.122	A	1	A	B
36	T 4-Methyl-2-pentanone (MIBK)	43	13.31	1.135	A	2	A	B
37	T trans-1,3-Dichloropropene	75	13.73	1.171	A	1	A	B
38	T 1,1,2-Trichloroethane	83	13.95	1.189	A	2	A	B
39	S Toluene-d8	98	14.12	1.204	A	0	A	B
40	T Toluene	92	14.21	1.212	A	1	A	B
41	I Chlorobenzene-d5	117	16.07	1.000	A	0	A	B
42	T 1,3-Dichloropropane	76	14.27	0.888	A	1	A	B
43	T 2-Hexanone	43	14.47	0.900	A	2	A	B
44	T Dibromochloromethane	129	14.64	0.911	A	1	A	B
45	T 1,2-Dibromoethane	107	14.98	0.932	A	2	A	B
46	T Tetrachloroethene	166	15.21	0.946	A	2	A	B
47	T 1,1,1,2-Tetrachloroethane	131	16.01	0.996	A	2	A	B
48	T Chlorobenzene	112	16.12	1.003	A	2	A	B
49	T Ethylbenzene	91	16.37	1.019	A	1	A	B
50	T m,p-Xylenes	106	16.64	1.035	A	1	A	B
51	T Styrene	104	17.09	1.064	A	1	A	B
52	T o-Xylene	106	17.19	1.070	A	1	A	B
53	S 4-Bromofluorobenzene	95	17.75	1.105	A	2	A	B
54	1,4-Dichlorobenzene-d4	152	19.53	1.000	A	2	A	B
55	T Bromoform	173	16.81	0.861	A	1	A	B
56	T 1,1,2,2-Tetrachloroethane	83	17.18	0.879	A	2	A	B
57	T 1,2,3-Trichloropropane	110	17.38	0.890	A	1	A	B
58	T Isopropylbenzene	105	17.69	0.906	A	1	A	B
59	T Bromobenzene	156	18.05	0.924	A	2	A	B

60	T	n-Propylbenzene	91	18.30	0.937	A	1	A	B
61	T	2-Chlorotoluene	91	18.44	0.944	A	1	A	R
62	T	4-Chlorotoluene	91	18.55	0.949	A	1	A	R
63	T	1,3,5-Trimethylbenzene	105	18.70	0.957	A	1	A	B
64	T	tert-Butylbenzene	119	19.09	0.977	A	1	A	B
65	T	1,2,4-Trimethylbenzene	105	19.23	0.984	A	1	A	B
66	T	sec-Butylbenzene	105	19.37	0.992	A	1	A	B
67	T	1,3-Dichlorobenzene	146	19.48	0.997	A	2	A	R
68	T	1,4-Dichlorobenzene	146	19.57	1.002	A	2	A	R
69	T	p-Isopropyltoluene	119	19.61	1.004	A	2	A	B
70	T	1,2-Dichlorobenzene	146	20.02	1.025	A	2	A	B
71	T	n-Butylbenzene	91	20.12	1.030	A	1	A	B
72	T	1,2-Dibromo-3-chloropropane	157	20.58	1.054	A	1	A	B
73	T	1,2,4-Trichlorobenzene	180	22.28	1.141	A	1	A	B
74	T	Naphthalene	128	22.63	1.158	A	0	A	B
75	T	Hexachlorobutadiene	225	22.68	1.161	A	1	A	B
76	T	1,2,3-Trichlorobenzene	180	22.90	1.172	A	1	A	B

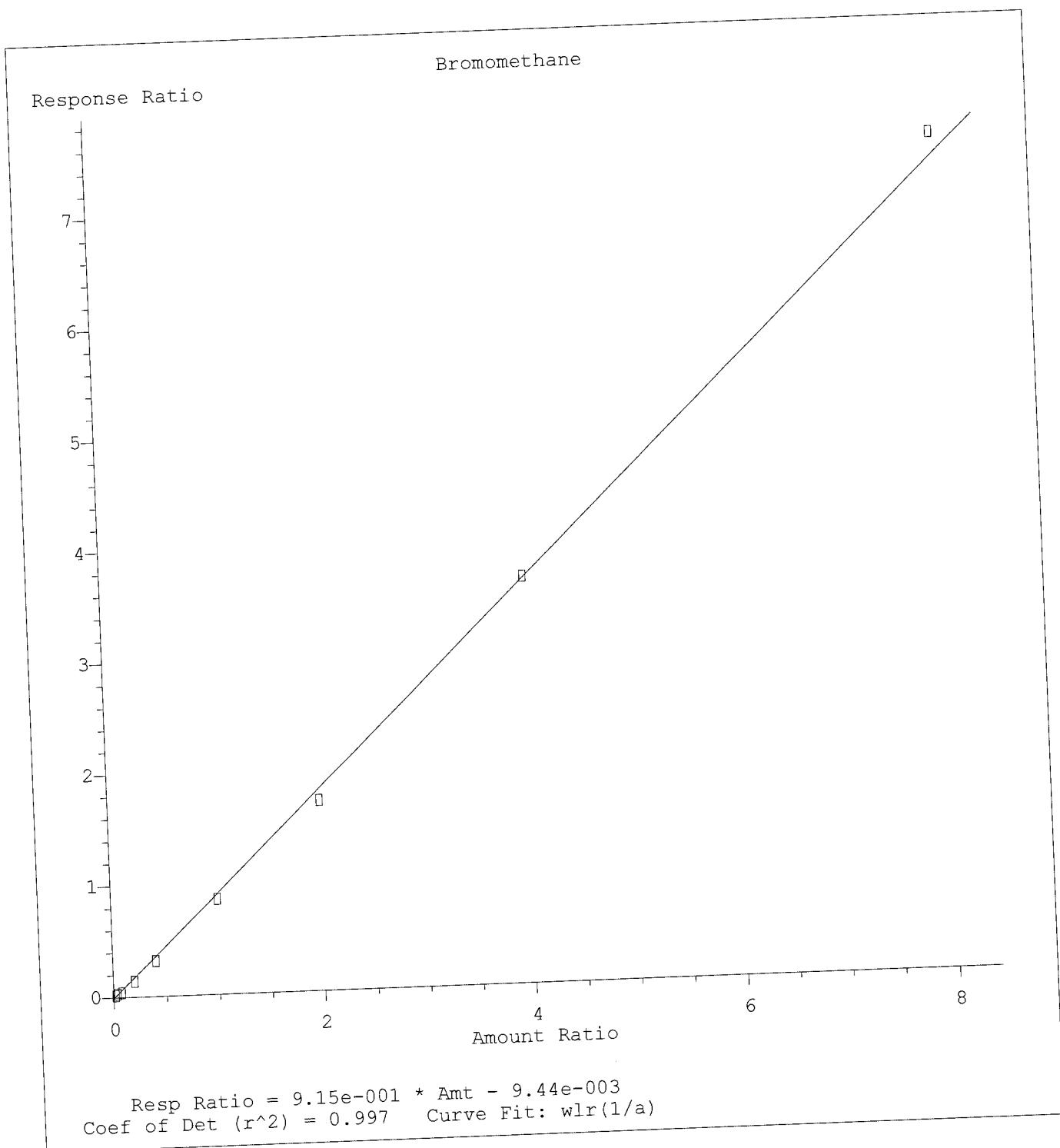
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#Qual = number of qualifiers

A/H = Area or Height

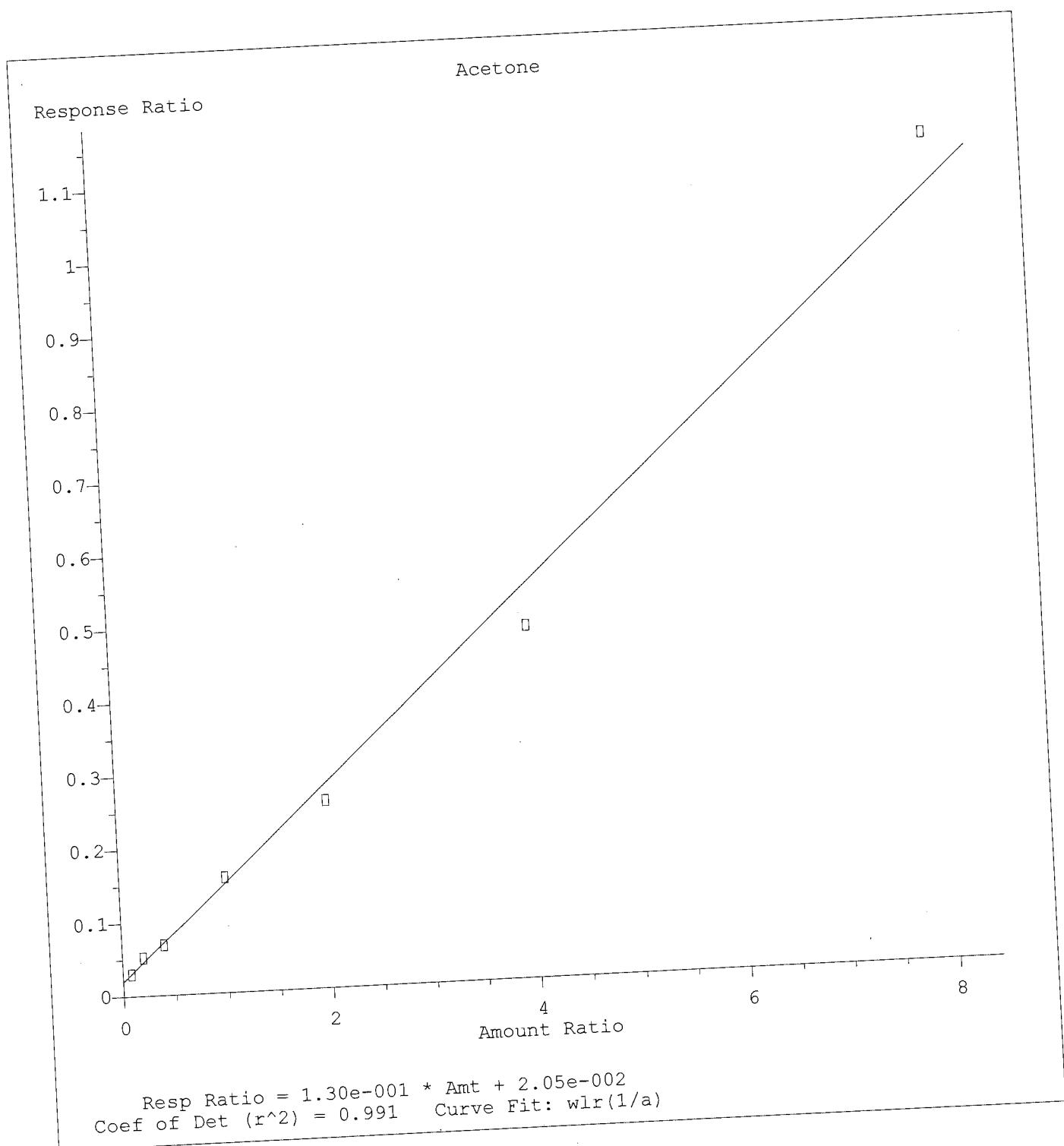
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031711.M Thu Mar 17 14:51:24 2011



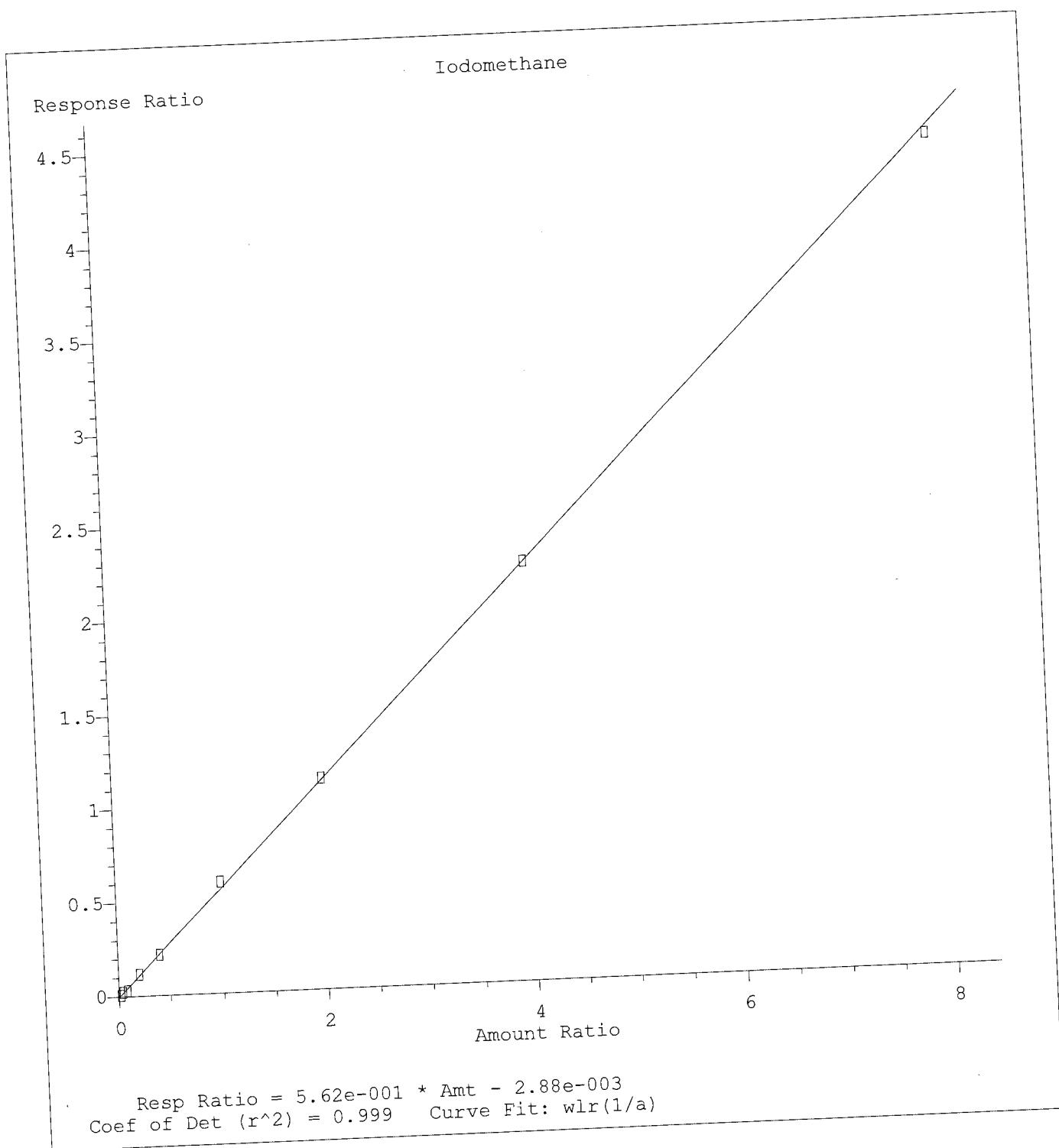
Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

*2011/03/17*  
 33 of 262



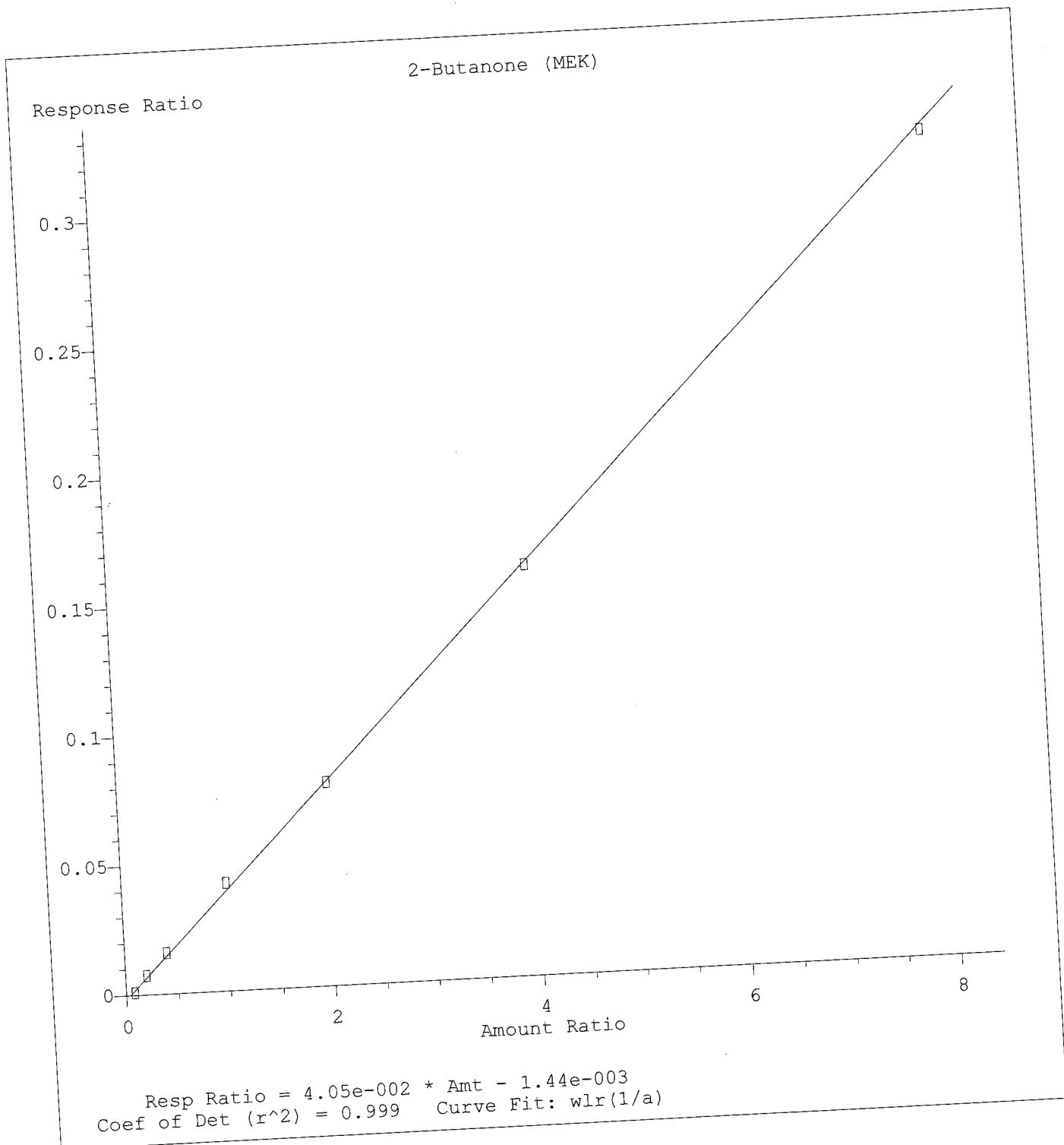
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 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

3/1/11  
 Acetone



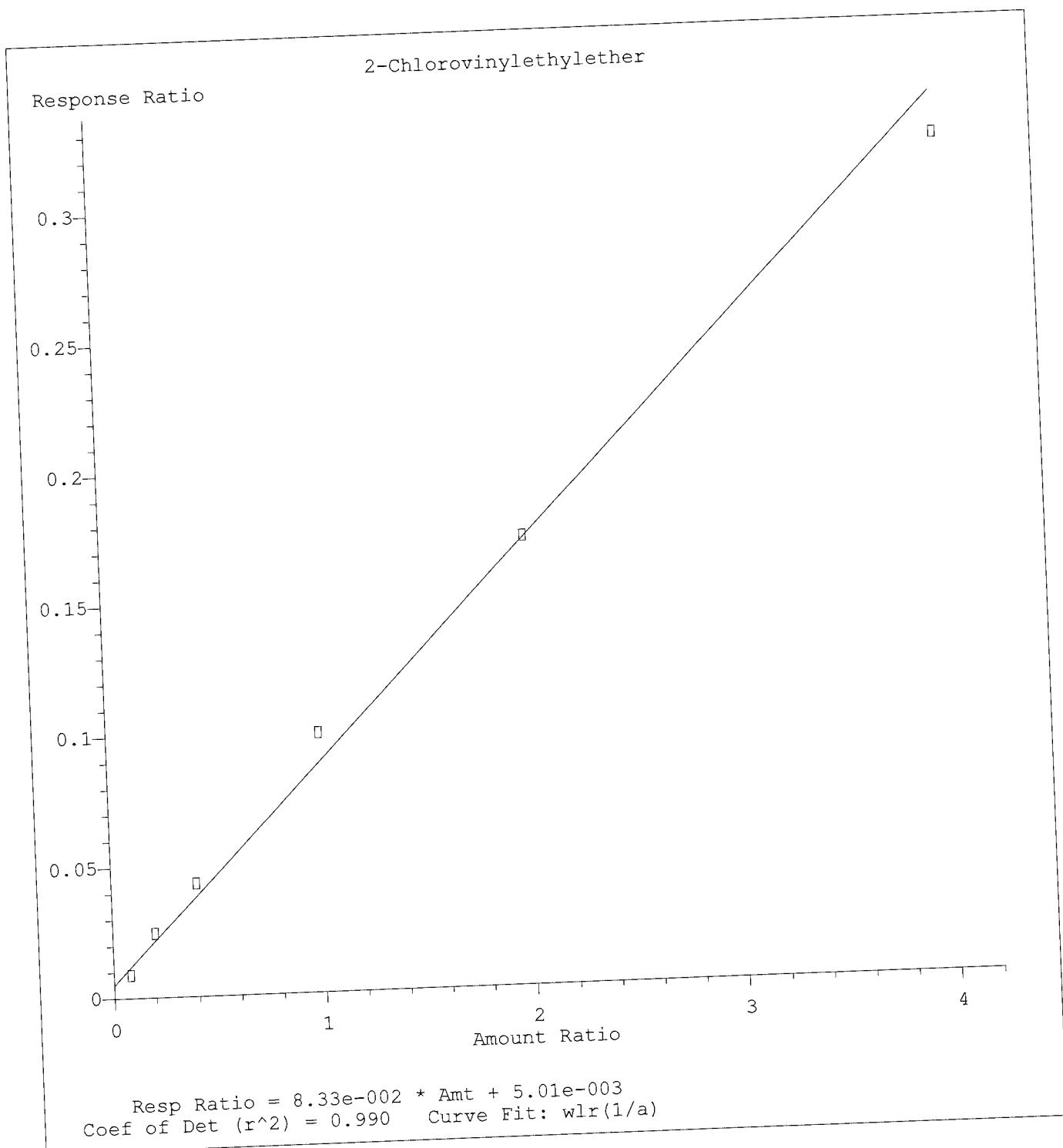
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ms 411M  
 CC 031811



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
 Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

3/11/11  
 2013/8/11



Method Name: C:\HPCHEM\1\GCMS7\METHODS\031711.M  
Calibration Table Last Updated: Thu Mar 17 14:08:36 2011

M 17/3/11  
C:\031711

## Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\031711

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03171101.d	1.	TUNE		17 Mar 2011 06:59
2	1	03171102.d	1.	TUNE		17 Mar 2011 07:16
3	16	03171103.d	1.	25 PPB CCV		17 Mar 2011 07:36
4	1	03171104.d	1.	BLANK		17 Mar 2011 08:10
5	2	03171105.d	1.	BLANK		17 Mar 2011 08:41
6	3	03171106.d	1.	0.5 PPB		17 Mar 2011 09:12
7	4	03171107.d	1.	1.0 PPB		17 Mar 2011 09:43
8	5	03171108.d	1.	2.0 PPB		17 Mar 2011 10:14
9	6	03171109.d	1.	5.0 PPB		17 Mar 2011 10:45
10	7	03171110.d	1.	10 PPB		17 Mar 2011 11:15
11	8	03171111.d	1.	25 PPB		17 Mar 2011 11:46
12	9	03171112.d	1.	50 PPB		17 Mar 2011 12:17
13	10	03171113.d	1.	100 PPB		17 Mar 2011 12:48
14	12	03171114.d	1.	200 PPB		17 Mar 2011 13:19
15	13	03171115.d	1.	SS		17 Mar 2011 13:50
16	16	03171116.d	1.	TERTIARY GAS		17 Mar 2011 14:20
17	1	03171117.d	1.	TUNE		17 Mar 2011 14:47
18	1	03171118.d	1.	25 PPB CCV		17 Mar 2011 15:06
19	2	03171119.d	1.	-BS1		17 Mar 2011 15:37
20	3	03171120.d	1.	-BSD1		17 Mar 2011 16:07
21	4	03171121.d	1.	-BLK1		17 Mar 2011 16:38
22	5	03171122.d	1.	PUC1019-01@16:20		17 Mar 2011 17:09
23	6	03171123.d	1.	PUC1019-02@16:22		17 Mar 2011 17:40
24	7	03171124.d	1.	PUC1025-02@16:25	5X	17 Mar 2011 18:10
25	8	03171125.d	1.	PUC1025-01	1X	17 Mar 2011 18:41
26	9	03171126.d	1.	PUC1025-01	1X	17 Mar 2011 19:12
27	13	03171127.d	1.	PUC1025-01DUP1		17 Mar 2011 19:43
28	16	03171128.d	1.	PUC0795-01		17 Mar 2011 20:13
29	1	03171129.d	1.	PUC0795-02		17 Mar 2011 20:44
30	2	03171130.d	1.	PUC0795-03		17 Mar 2011 21:15
31	3	03171131.d	1.	PUC0795-04		17 Mar 2011 21:46
32	4	03171132.d	1.	PUC0795-05		17 Mar 2011 22:17
33	5	03171133.d	1.	PUC0795-06		17 Mar 2011 22:48
34	6	03171134.d	1.	11C0657-MS1		17 Mar 2011 23:19
35	7	03171135.d	1.	11C0657-MSD1		17 Mar 2011 23:50
36	10	03171136.d	1.	BLK		18 Mar 2011 00:21
37	12	03171137.d	1.	BLK		18 Mar 2011 00:51

M 1/1/11  
ve 03/18/11

TestAmerica

Phoenix

DATE: 03/17/11

ANALYST: LC

## GC/MS 7 DAILY LOG SUMMARY

QC BATCH # (s):

11C0657, 0659

Air

H<sub>2</sub>O

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\ 031711

CALIBRATION METHOD(S): 031411.m

New Curve - 031711.m

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	03171101	Tune	2uL	N/A	8260B	H <sub>2</sub> O	DNU - Incurred Std.
1	02	—	—				
16	03	25 PPB CCV	1x10mL				
1	04	Blank	—				DNU - Acetone
2	05	—	—				DNU - Clean Out
3	06	0.5 PPB	—				
4	07	1.0	—				
5	08	2.0	—				
6	09	5.0	—				
7	10	10	—				
8	11	25	—				
9	12	50	—				
10	13	100	—				
12	14	200	—				
13	15	5S	—				
16	16	Tertiary Gas	1x10cc			Air	Bromomethane 49%
1	17	Tune	2uL			H <sub>2</sub> O	
1	18	25 PPB CCV	1x10mL				Acet↑
2	19	11C0657 -BS1	—				iodo, cd↑ 11C0659-B
3	20	-BS2	—				iodo↑
4	21	-BLK1	—				B
5	22	PUC1079-01A	1x10cc			Air	16:20
6	23	— O2 A	—				16:22
7	24	1025-02 A	—				16:25
8	25	1025-01 A @5X 2cc → 10cc	—				16:30
9	26	-D1 A @1X 1x10cc	—				16:27
13	27	-01 DUP 1	—				16:32 11C0657-DLU
16	28	PUC10795-01A	1x10mL	≤2		H <sub>2</sub> O	source
1	29	— O2 A	—	≤2			
2	30	— O3A	—	≤2			

## STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PUC1537

CALIBRATION STD: 1525 / PUC1528

Internal Std: 1521

IS/Surrogate/BFB: 1534 / PUC1761

LOT #: 3<sup>o</sup> Gas: PTOu459

## REQUIRED REVIEWS

## ARCHON REVIEWED

By / Date: LC 03/17/11

## SEQUENCE REVIEWED

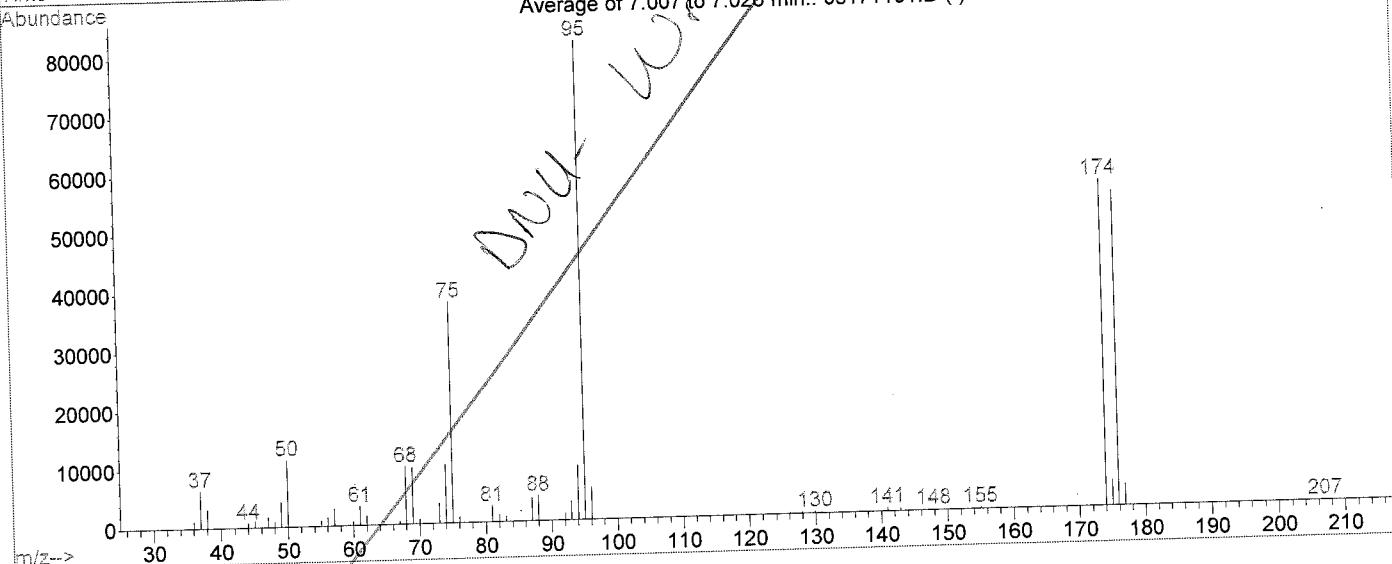
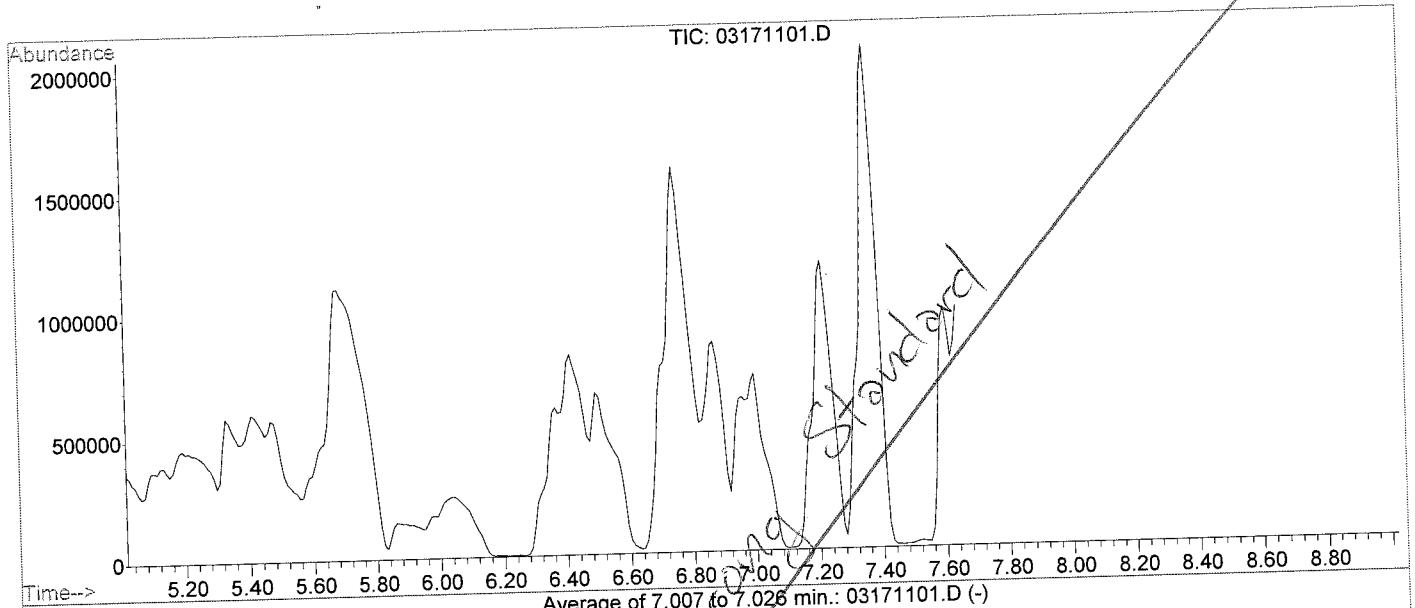
By / Date: LC 03/17/11

FINAL REVIEWER / Date: M 1, 11/11

39 of 262

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171101.D Vial: 1  
 Acq On : 17 Mar 2011 6:59 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

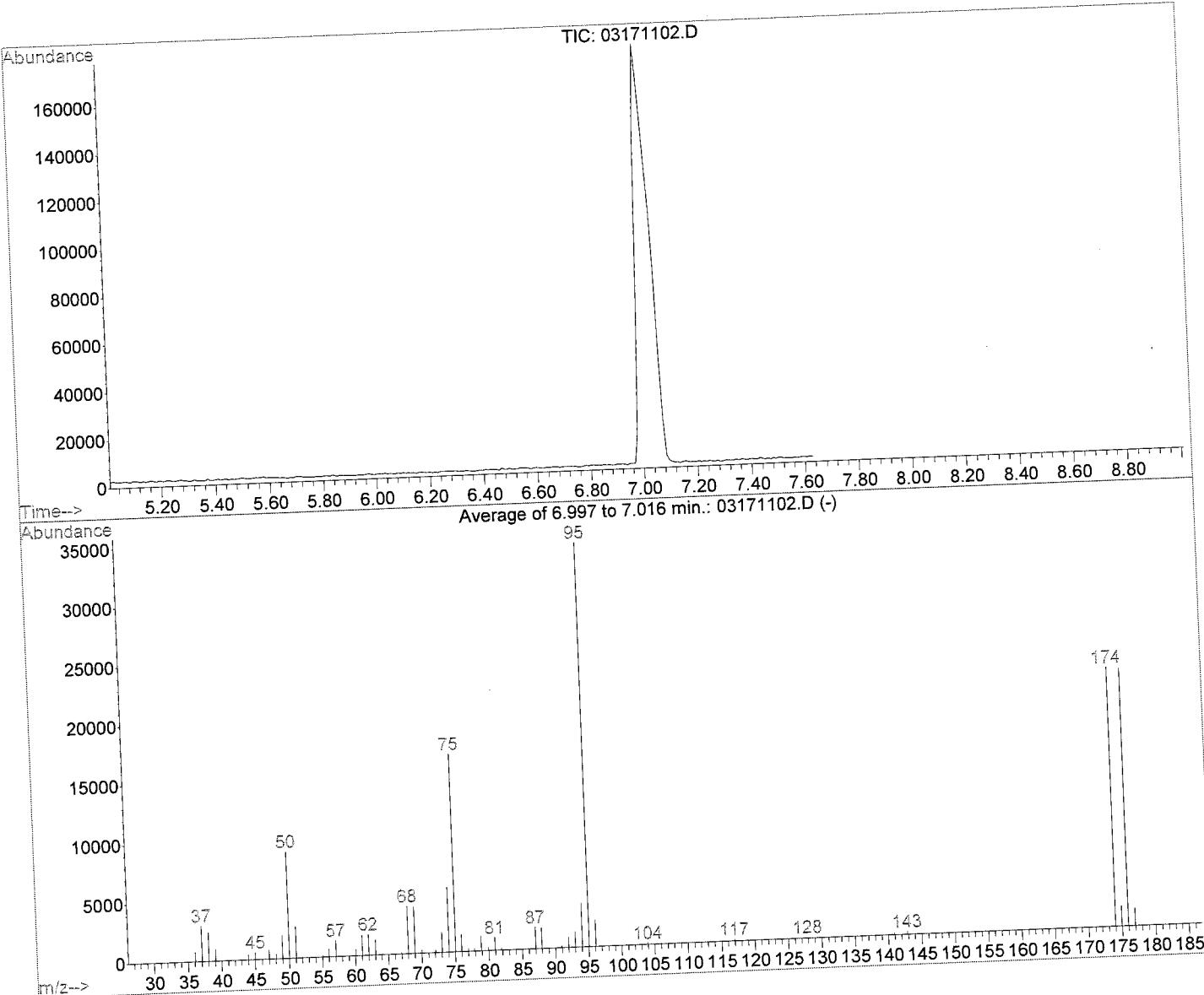


Spectrum Information: Average of 7.007 to 7.026 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	13.9	11317	FAIL*
75	95	30	60	46.1	37626	PASS
95	95	100	100	100.0	81675	PASS
96	95	5	9	6.6	5429	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.1	55616	PASS
175	174	5	9	7.8	4344	PASS
176	174	95	101	96.5	53661	PASS
177	176	5	9	6.7	3599	PASS

## Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171102.D Vial: 1  
 Acq On : 17 Mar 2011 7:16 am Operator: LC  
 Sample : TUNE Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B



Spectrum Information: Average of 6.997 to 7.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.3	8966	PASS
75	95	30	60	48.9	16685	PASS
95	95	100	100	100.0	34109	PASS
96	95	5	9	6.4	2195	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.1	21869	PASS
175	174	5	9	7.8	1697	PASS
176	174	95	101	99.3	21715	PASS
177	176	5	9	6.7	1463	PASS

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	183444	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	325784	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	270420	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	118494	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	106054	24.28	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.12%	
39) Toluene-d8	14.11	98	384866	24.78	ug/L	0.00
Spiked Amount 25.000			Recovery	=	99.12%	
53) 4-Bromofluorobenzene	17.75	95	134955	24.39	ug/L	0.00
Spiked Amount 25.000			Recovery	=	97.56%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	203514	22.97	ug/L	100
3) Chloromethane	4.90	50	349427	27.92	ug/L	100
4) Vinyl chloride	5.19	62	318799	26.09	ug/L	99
5) Bromomethane	5.78	94	141014	26.05	ug/L	96
6) Chloroethane	5.99	64	169039	25.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	229398	25.07	ug/L	99
8) Acetone	6.93	43	87501	Below Cal		97
9) Iodomethane	7.58	142	98773	23.31	ug/L	98
10) 1,1-Dichloroethene	7.52	96	122197	26.18	ug/L	94
11) Methylene chloride	7.71	84	141233	23.11	ug/L	100
12) Freon 113	7.78	101	141514	23.82	ug/L	99
13) Carbon disulfide	8.03	76	424756	25.69	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	133127	23.44	ug/L	97
15) MTBE	8.73	73	229415	23.89	ug/L	98
16) 1,1-Dichloroethane	8.92	63	275296	23.59	ug/L	99
17) Vinyl acetate	9.08	43	220376	24.39	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7147	23.08	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	138298	23.44	ug/L	98
20) Bromochloromethane	9.87	128	51964	23.76	ug/L	97
21) Chloroform	9.93	83	226993	23.52	ug/L	100
22) 2,2-Dichloropropane	10.03	77	199254	24.74	ug/L	99
24) 1,2-Dichloroethane	10.78	62	137605	24.05	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	172734	23.93	ug/L	98
27) 1,1-Dichloropropene	11.15	75	199034	23.87	ug/L	99
28) Carbon tetrachloride	11.39	117	140086	24.16	ug/L	99
29) Benzene	11.44	78	525784	23.82	ug/L	100
30) Dibromomethane	12.17	93	59810	22.72	ug/L	99
31) 1,2-Dichloropropane	12.21	63	147015	23.80	ug/L	100
32) Trichloroethene	12.26	95	130559	23.47	ug/L	100
33) Bromodichloromethane	12.33	83	152627	23.43	ug/L	97
34) 2-Chlorovinylethylether	12.86	63	34857	23.00	ug/L	98
35) cis-1,3-Dichloropropene	13.17	75	192256	24.47	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	79041	22.82	ug/L	98
37) trans-1,3-Dichloropropene	13.73	75	148191	24.15	ug/L	98
38) 1,1,2-Trichloroethane	13.95	83	69853	23.20	ug/L	96
40) Toluene	14.21	92	301555	24.42	ug/L	99
42) 1,3-Dichloropropane	14.27	76	144303	23.31	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171103.D 031411.M Thu Mar 17 13:54:27 2011

## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	52512	24.58	ug/L	# 99
44) Dibromochloromethane	14.65	129	85525	24.04	ug/L	98
45) 1,2-Dibromoethane	14.98	107	75677	25.06	ug/L	99
46) Tetrachloroethene	15.20	166	116159	23.97	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	93416	24.16	ug/L	98
48) Chlorobenzene	16.12	112	306146	24.04	ug/L	97
49) Ethylbenzene	16.38	91	563689	24.00	ug/L	99
50) m,p-Xylenes	16.64	106	197842	23.89	ug/L	100
51) Styrene	17.09	104	313010	24.57	ug/L	100
52) o-Xylene	17.19	106	188426	23.54	ug/L	100
55) Bromoform	16.81	173	45375	27.10	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	85826	24.73	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	19634	26.45	ug/L	97
58) Isopropylbenzene	17.70	105	467417	25.22	ug/L	100
59) Bromobenzene	18.05	156	105243	25.16	ug/L	98
60) n-Propylbenzene	18.30	91	657511	25.12	ug/L	100
61) 2-Chlorotoluene	18.44	91	374515	24.85	ug/L	99
62) 4-Chlorotoluene	18.55	91	377509	25.07	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	397648	25.20	ug/L	99
64) tert-Butylbenzene	19.09	119	338640	25.00	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	398096	24.77	ug/L	98
66) sec-Butylbenzene	19.38	105	570587	24.77	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	211237	24.59	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	208652	24.28	ug/L	99
69) p-Isopropyltoluene	19.61	119	450706	25.20	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	179425	24.69	ug/L	99
71) n-Butylbenzene	20.11	91	503050	25.42	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	11007	24.17	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	125573	24.32	ug/L	99
74) Naphthalene	22.62	128	162763	24.75	ug/L	100
75) Hexachlorobutadiene	22.68	225	79503	27.59	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	100849	23.50	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171103.D 031411.M Thu Mar 17 13:54:27 2011

Page 1

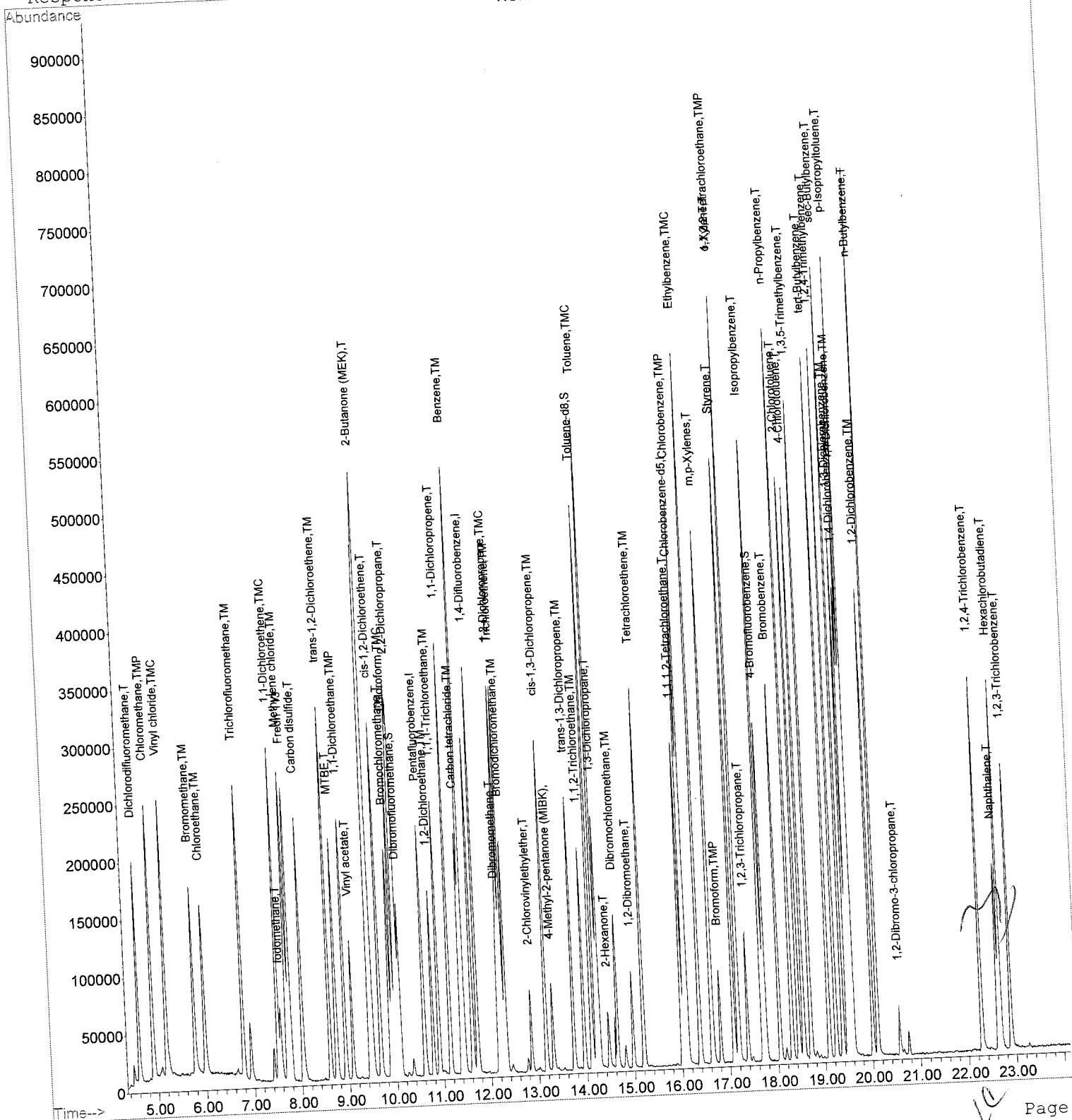
43 of 262

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171103.D Vial: 16  
 Acq On : 17 Mar 2011 7:36 am Operator: LC  
 Sample : 25 PPB CCV Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:54 2011 Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171103.D



## Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	208596	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	368454	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	303623	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	134043	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	111829	22.51	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.04%		
39) Toluene-d8	14.11	98	400008	22.77	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.08%		
53) 4-Bromofluorobenzene	17.75	95	138919	22.36	ug/L	0.00
Spiked Amount 25.000			Recovery =	89.44%		
Target Compounds				Ovalue		
8) Acetone	6.94	43	4324	1.42	ug/L	# 65
10) 1,1-Dichloroethene	7.51	96	60	Below Cal	#	73
13) Carbon disulfide	8.03	76	742	Below Cal		100
24) 1,2-Dichloroethane	10.60	62	1046	0.16	ug/L	# 1
36) 4-Methyl-2-pentanone (MIBK)	13.01	43	7775	1.98	ug/L	# 50
38) 1,1,2-Trichloroethane	14.12	83	373	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.11	76	4467	0.64	ug/L	# 68
73) 1,2,4-Trichlorobenzene	22.29	180	1153	0.20	ug/L	97
74) Naphthalene	22.63	128	8429	1.13	ug/L	100
76) 1,2,3-Trichlorobenzene	22.91	180	1057	0.22	ug/L	93

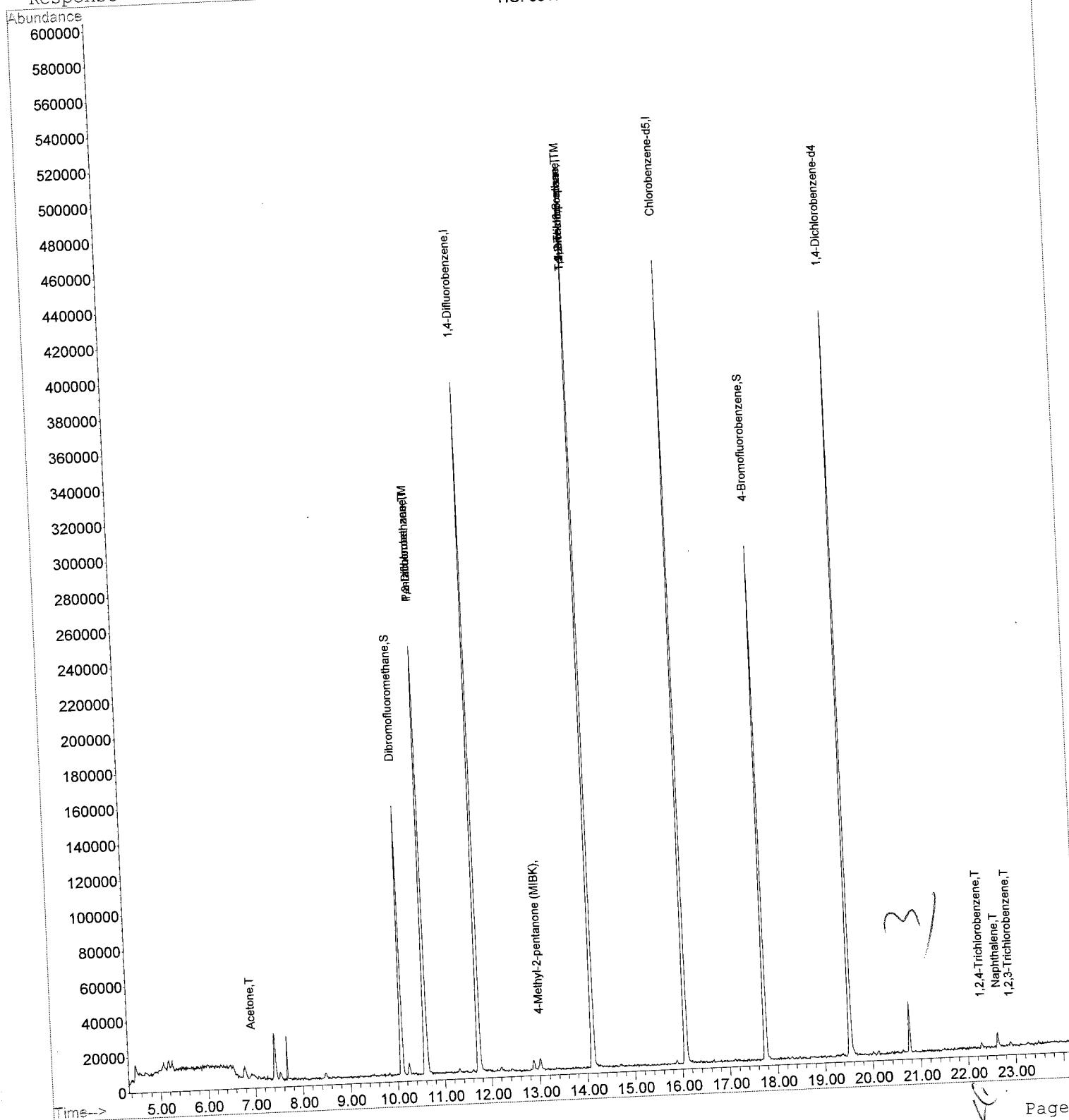
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 03171104.D 031411.M Thu Mar 17 13:54:37 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171104.D Vial: 1  
 Acq On : 17 Mar 2011 8:10 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171104.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	110687	24.00	ug/L	0.00
Spiked Amount 25.000			Recovery =	96.00%		
39) Toluene-d8	14.11	98	374753	22.97	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.88%		
53) 4-Bromofluorobenzene	17.75	95	131653	22.85	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.40%		
Target Compounds				Ovalue		
3) Chloromethane	4.89	50	1791	0.14 ug/L	L12L	98
8) Acetone	6.93	43	3328	0.96 ug/L	#	69
10) 1,1-Dichloroethene	7.53	96	127	Below Cal	#	1
13) Carbon disulfide	8.02	76	5282	Below Cal		100
17) Vinyl acetate	9.19	43	944	0.10 ug/L	#	82
24) 1,2-Dichloroethane	10.60	62	1206	0.20 ug/L	#	1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11 ug/L	#	102T70
42) 1,3-Dichloropropane	14.12	76	3863	0.60 ug/L	#	102L32
43) 2-Hexanone	14.46	43	235	0.11 ug/L	#	102L
74) Naphthalene	22.63	128	1667	0.23 ug/L	L	100

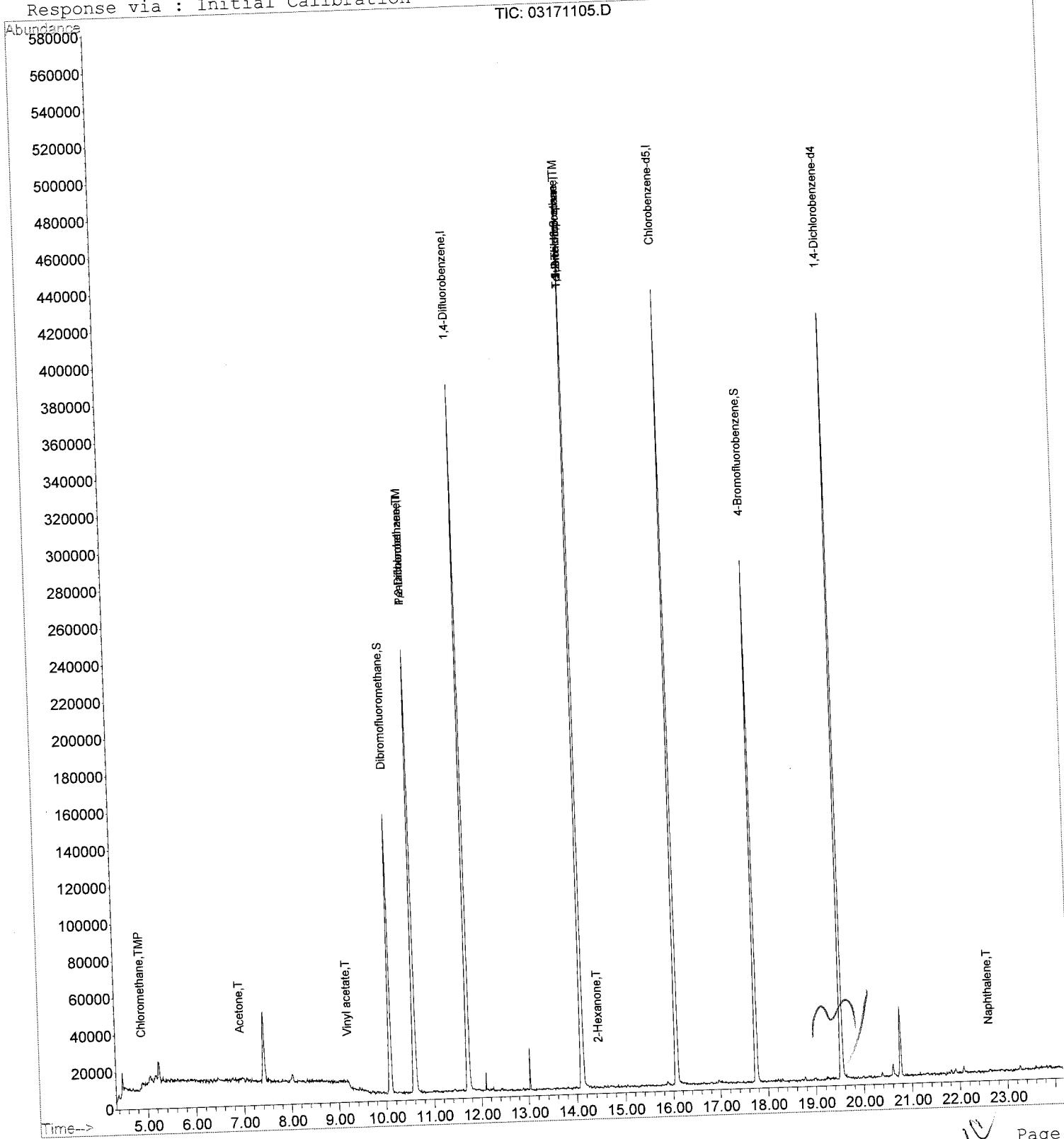
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 03171105.D 031411.M Thu Mar 17 13:54:55 2011

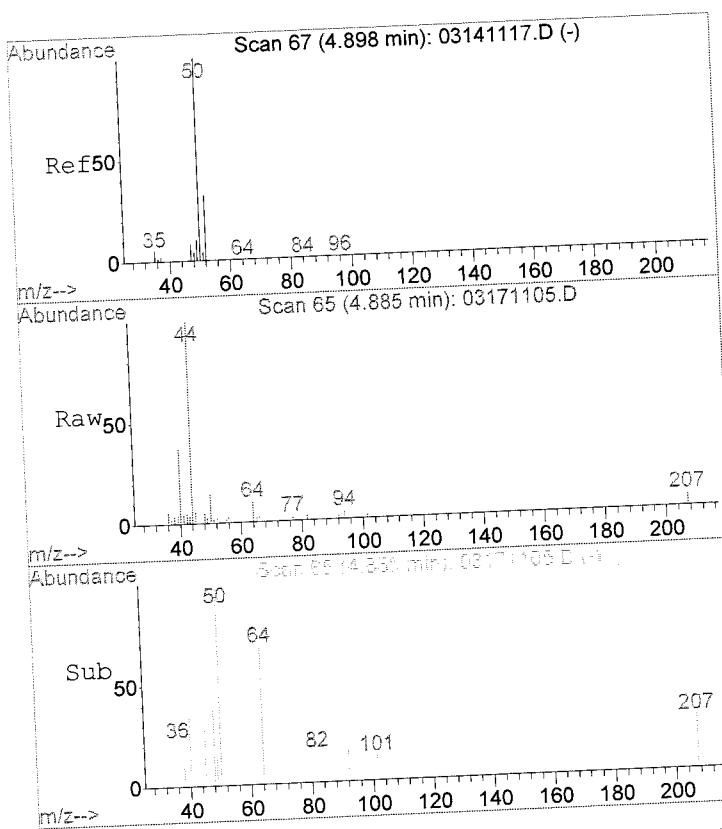
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:54 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

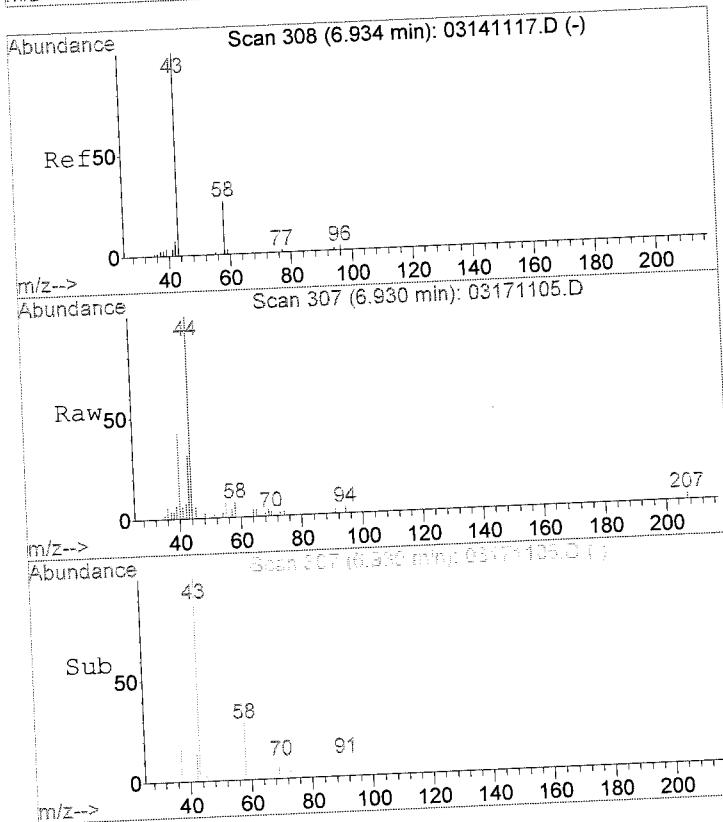
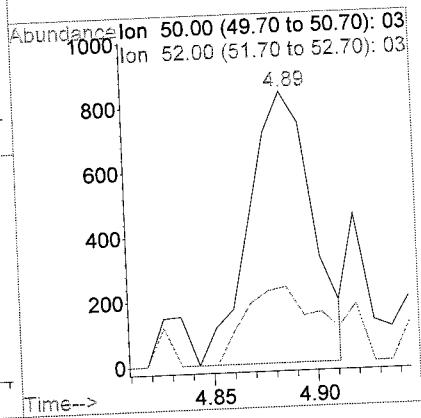
TIC: 03171105.D





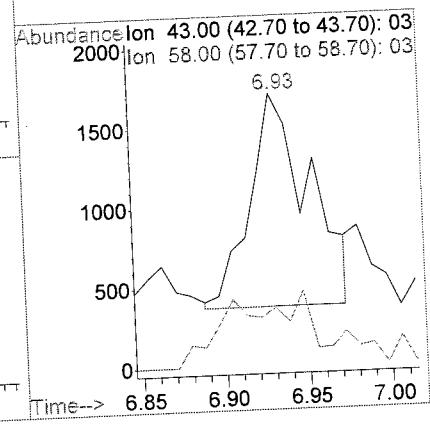
#3  
Chloromethane  
Concen: 0.14 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

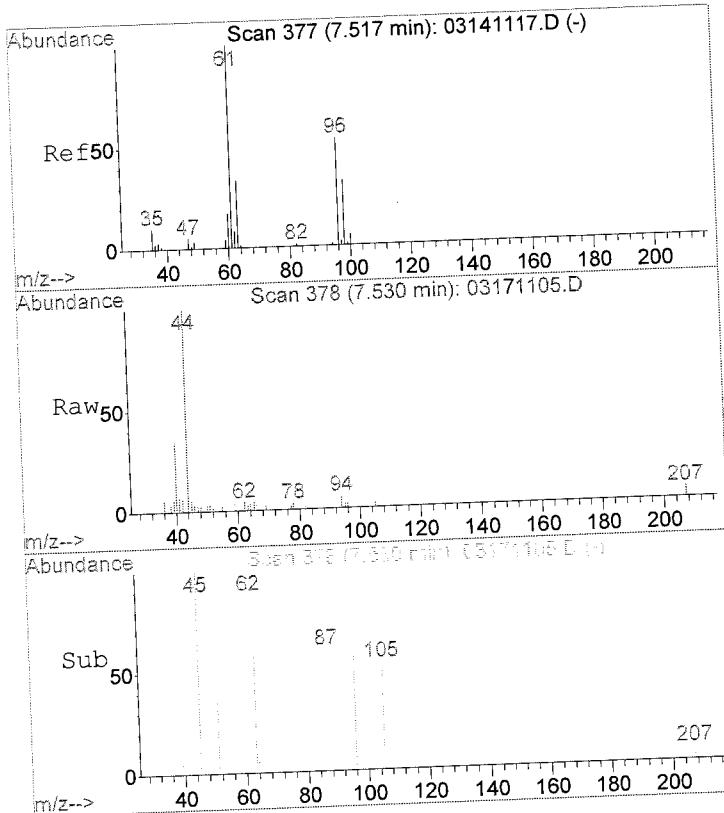
Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.4 38.2



#8  
Acetone  
Concen: 0.96 ug/L  
RT: 6.93 min Scan# 307  
Delta R.T. -0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

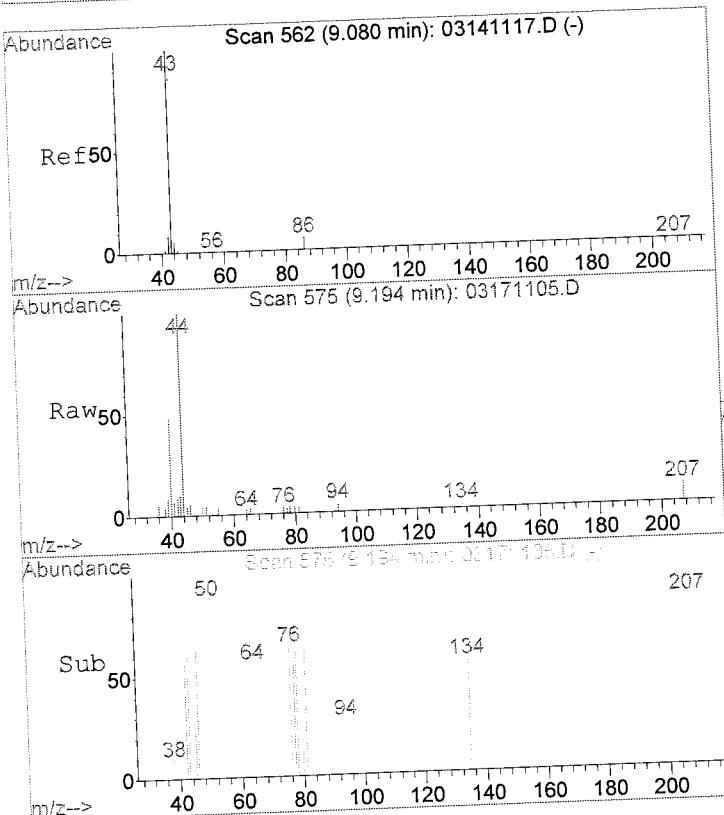
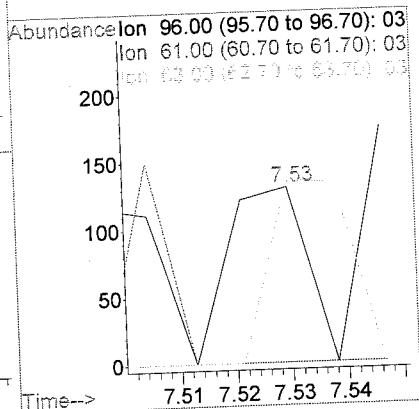
Tgt Ion: 43 Resp: 3328  
Ion Ratio Lower Upper  
43 100  
58 9.7 20.4 30.6#





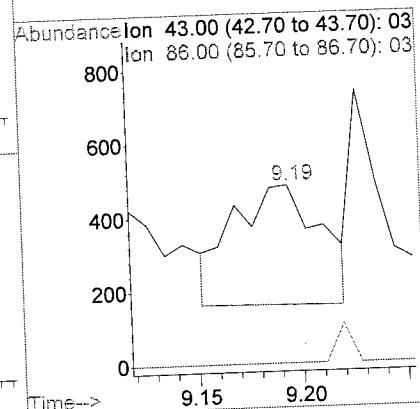
#10  
1,1-Dichloroethene  
Concen: Below Cal  
RT: 7.53 min Scan# 378  
Delta R.T. 0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

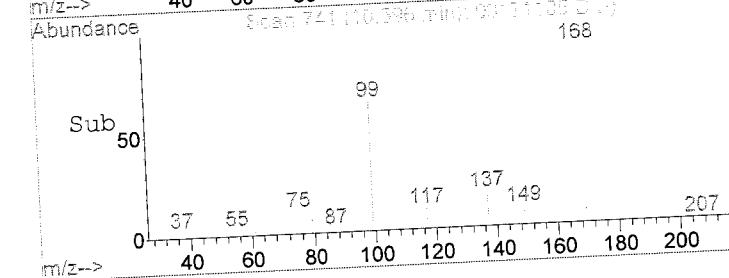
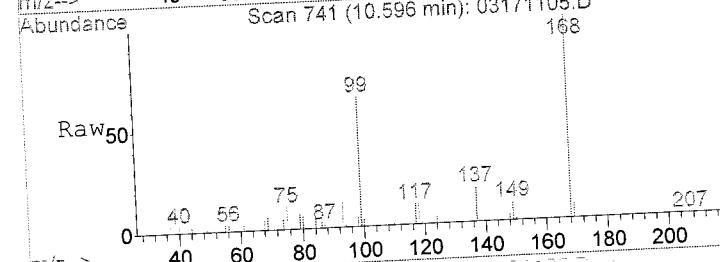
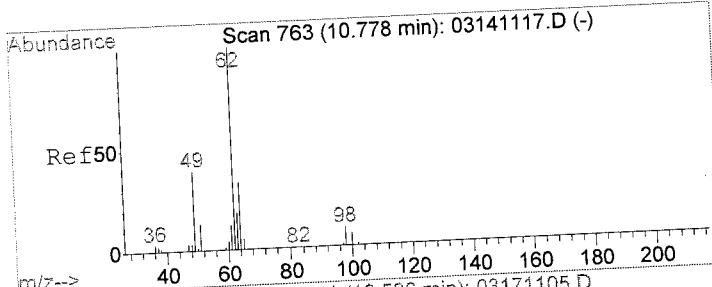
Tgt Ion: 96 Resp: 127  
Ion Ratio Lower Upper  
96 100  
61 0.0 164.0 246.0#  
63 107.1 51.4 77.0#



#17  
Vinyl acetate  
Concen: 0.10 ug/L  
RT: 9.19 min Scan# 575  
Delta R.T. 0.11 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

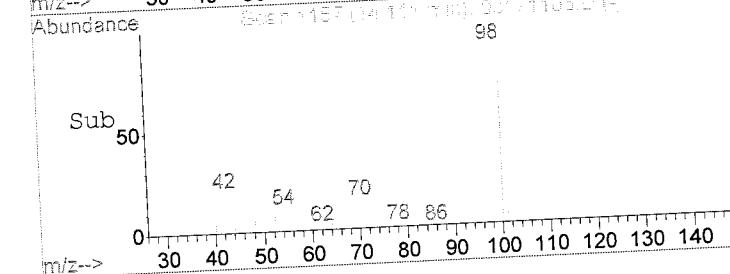
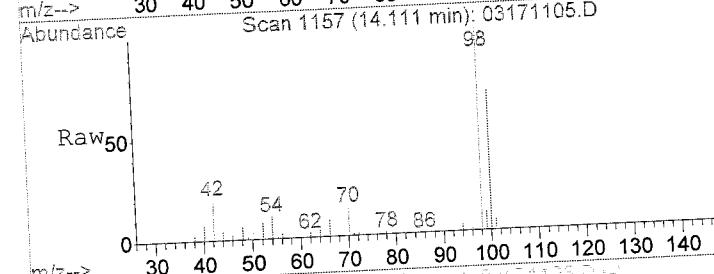
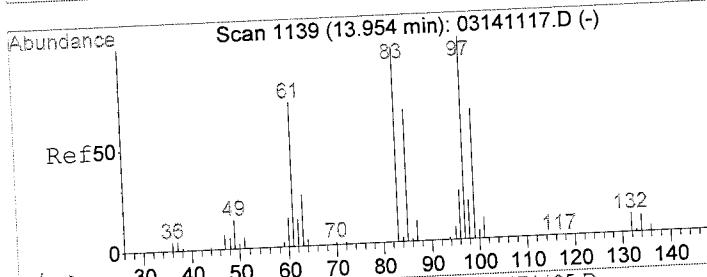
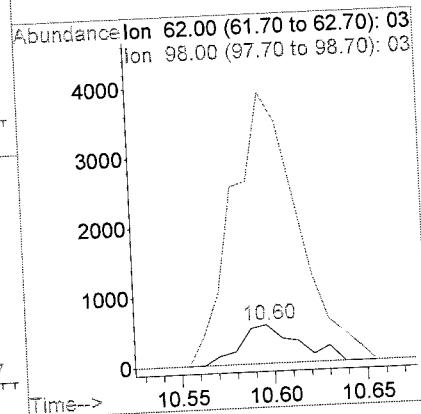
Tgt Ion: 43 Resp: 944  
Ion Ratio Lower Upper  
43 100  
86 0.0 4.7 7.1#





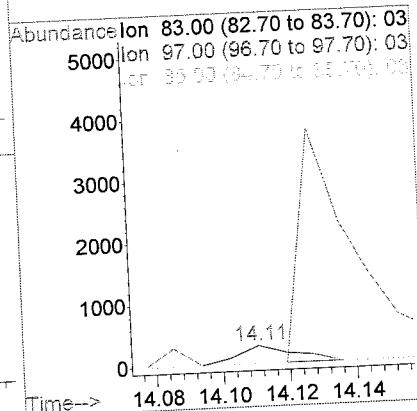
#24  
1,2-Dichloroethane  
Concen: 0.20 ug/L  
RT: 10.60 min Scan# 741  
Delta R.T. -0.18 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

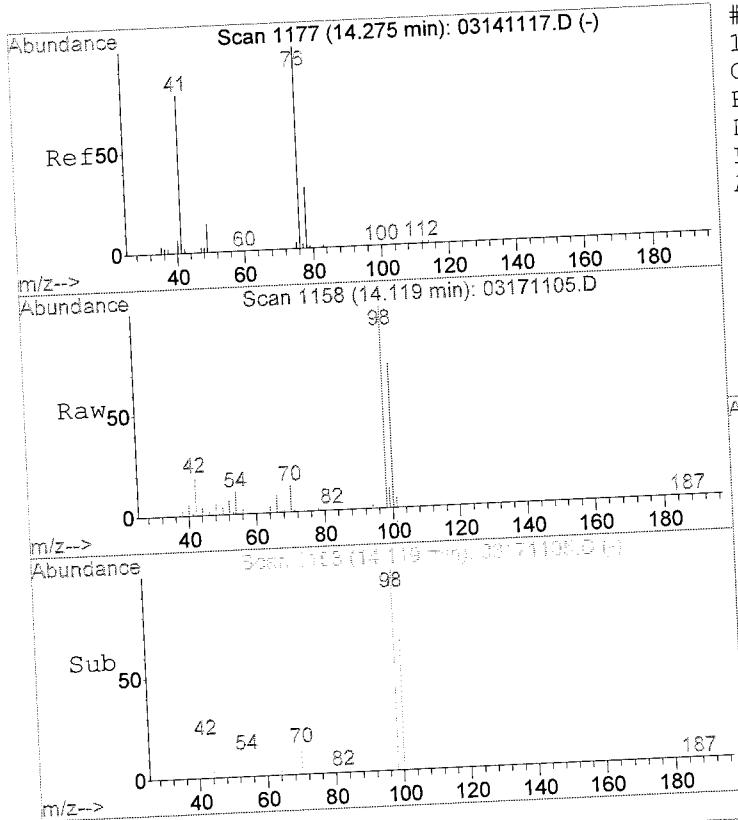
Tgt Ion: 62 Resp: 1206  
Ion Ratio Lower Upper  
62 100  
98 791.2 6.8 10.2#



#38  
1,1,2-Trichloroethane  
Concen: 0.11 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. 0.16 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

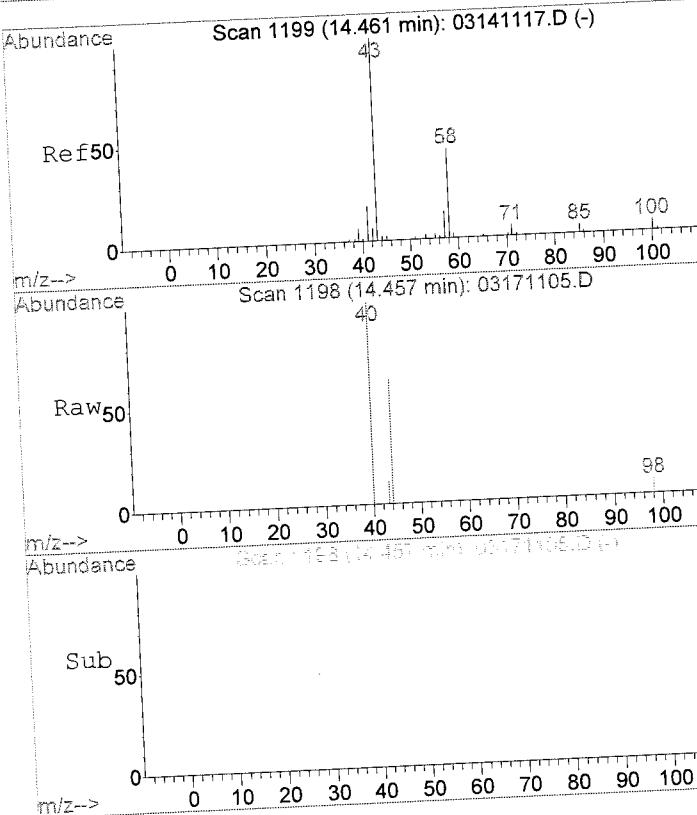
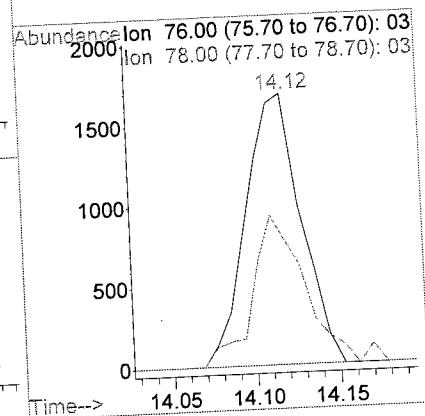
Tgt Ion: 83 Resp: 345  
Ion Ratio Lower Upper  
83 100  
97 1295.7 80.6 120.8#  
85 0.0 51.4 77.0#





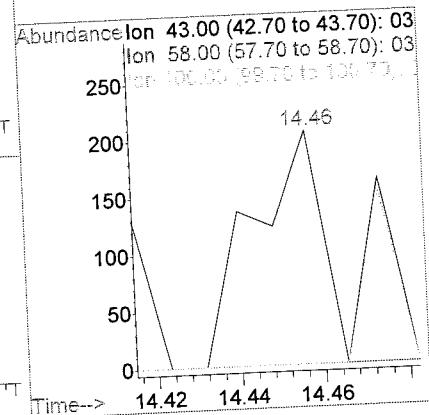
#42  
 1,3-Dichloropropane  
 Concen: 0.60 ug/L  
 RT: 14.12 min Scan# 1158  
 Delta R.T. -0.16 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

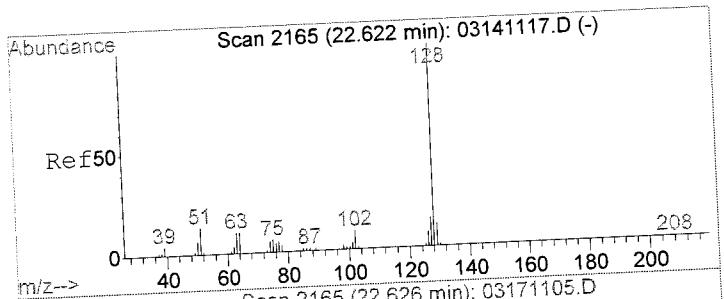
Tgt Ion: 76 Resp: 3863  
 Ion Ratio Lower Upper  
 76 100  
 78 48.4 25.5 38.3#



#43  
 2-Hexanone  
 Concen: 0.11 ug/L  
 RT: 14.46 min Scan# 1198  
 Delta R.T. -0.00 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

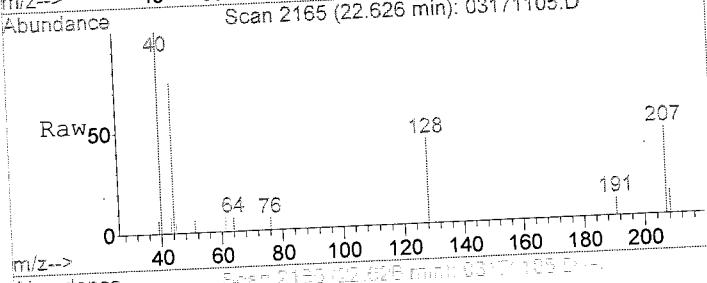
Tgt Ion: 43 Resp: 235  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 34.8 52.2#  
 100 0.0 0.0 0.0



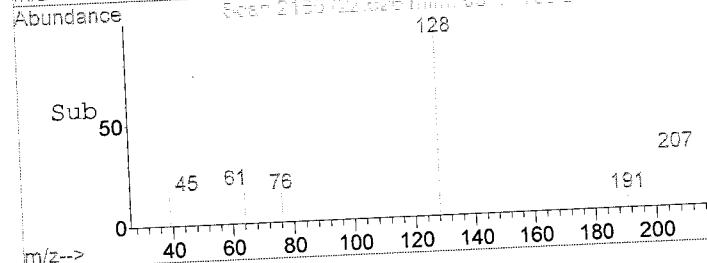
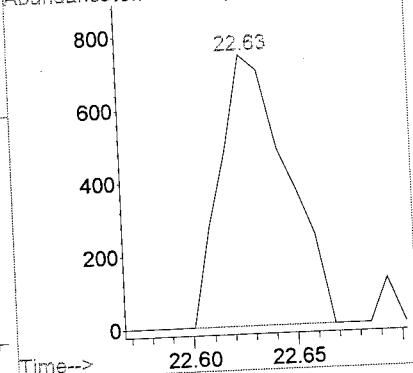


#74  
Naphthalene  
Concen: 0.23 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion:128 Resp: 1667



Abundance ion 128.00 (127.70 to 128.70):

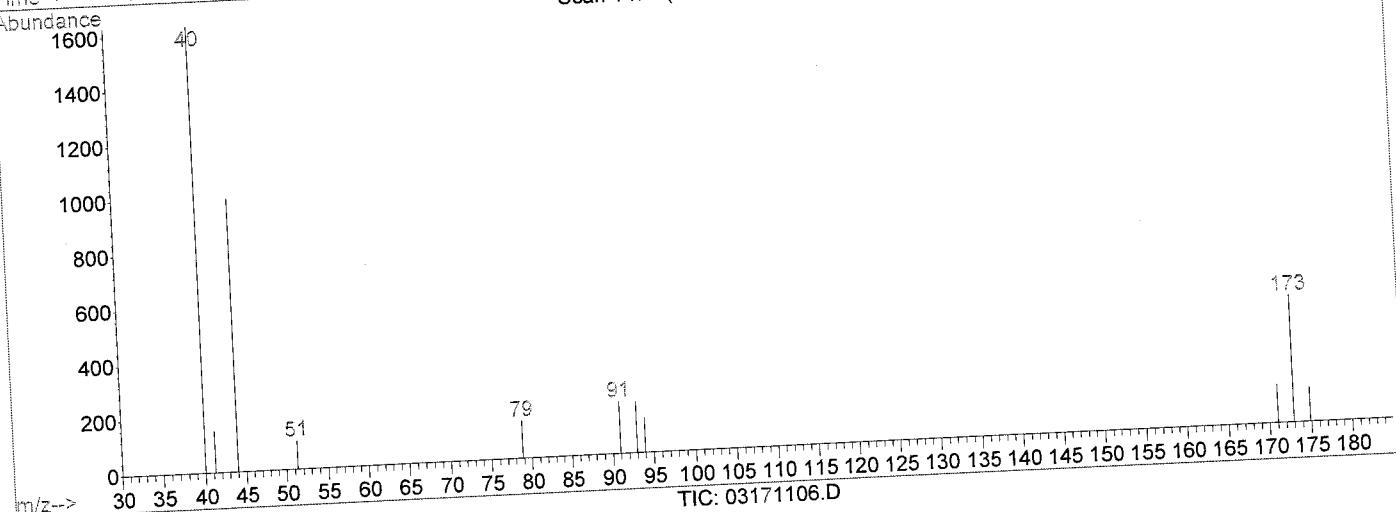
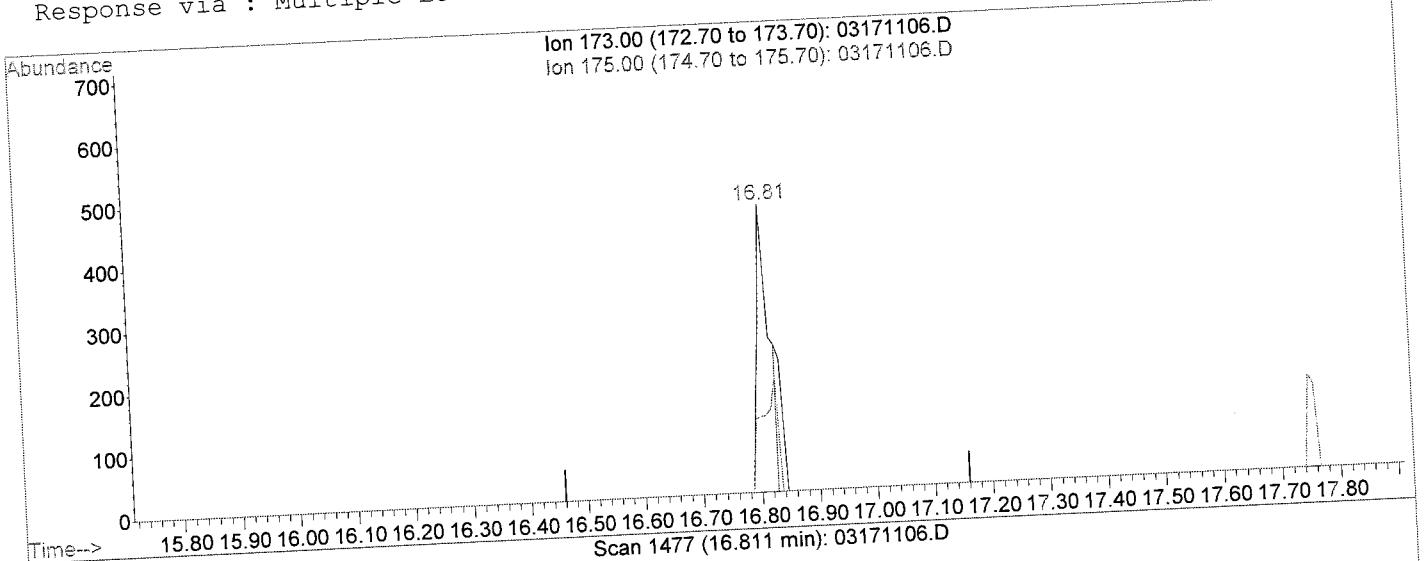


WV  
V  
Page

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:55 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP)

16.81min 0.42ug/L

response 696

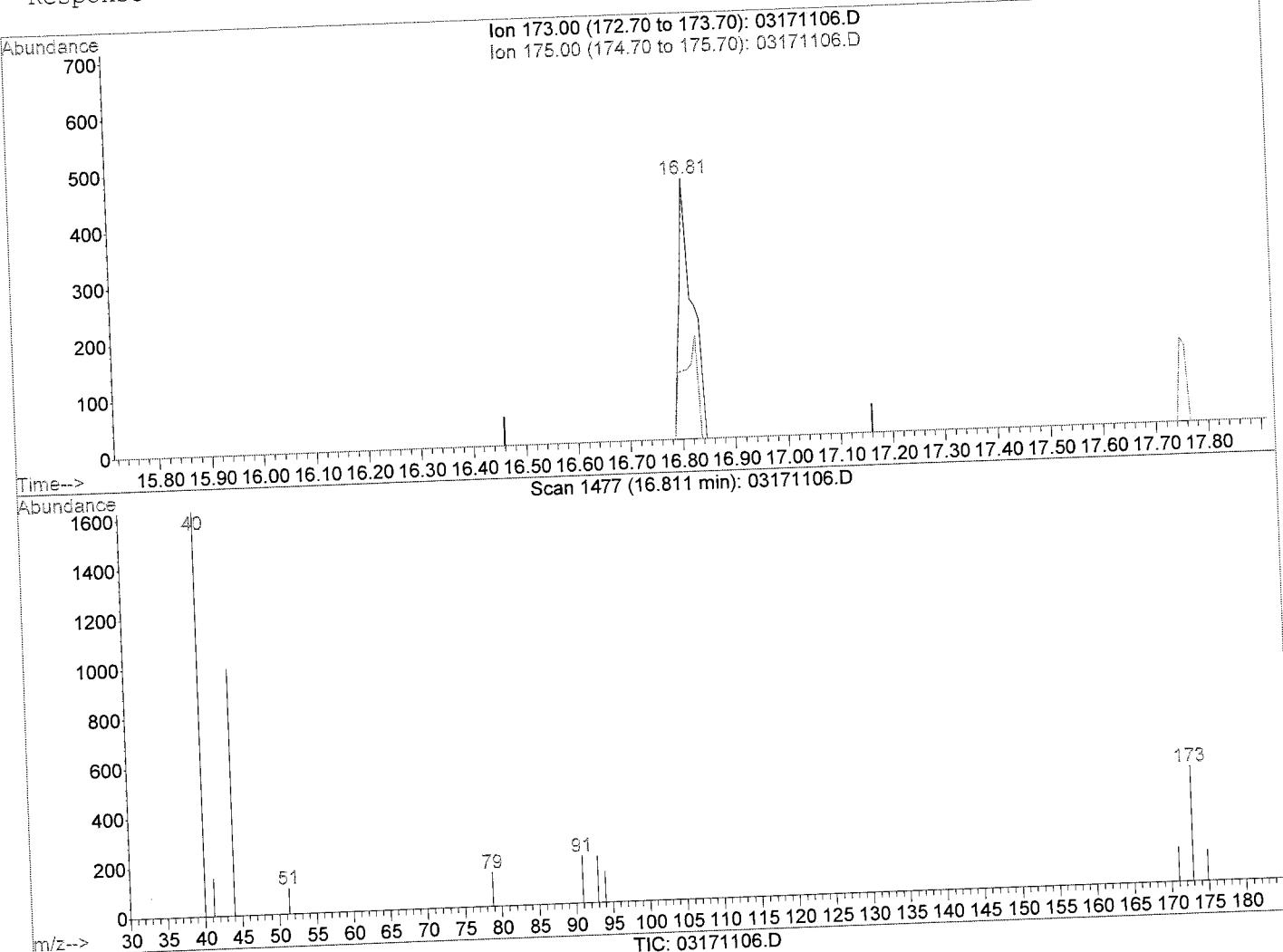
Ion	Exp%	Act%
173.00	100	100
175.00	50.90	23.13#
0.00	0.00	0.00
0.00	0.00	0.00

Before - SP

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(55) Bromoform (TMP )

16.81min 0.49ug/L m

response 803

Ion	Exp%	Act%
173.00	100	100
175.00	50.90	20.05#
0.00	0.00	0.00
0.00	0.00	0.00

After

W 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:56 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	2490	0.62	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.48%		
39) Toluene-d8	14.12	98	8971	0.63	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.52%		
53) 4-Bromofluorobenzene	17.76	95	3244	0.65	ug/L	0.00
Spiked Amount 25.000			Recovery =	2.60%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	4.60	85	4286	0.53	ug/L	92
3) Chloromethane	4.89	50	6587	0.58	ug/L	96
4) Vinyl chloride	5.18	62	6003	0.54	ug/L	90
5) Bromomethane	5.78	94	3084	0.62	ug/L	90
6) Chloroethane	5.97	64	3371	0.56	ug/L	# 75
7) Trichlorofluoromethane	6.77	101	4364	0.52	ug/L	93
8) Acetone	0.00	43	0	N.D.	d	
9) Iodomethane	7.58	142	1272	0.33	ug/L	95
10) 1,1-Dichloroethene	7.50	96	2883	0.40	ug/L	91
11) Methylene chloride	7.70	84	3890	0.70	ug/L	95
12) Freon 113	7.77	101	3509	0.65	ug/L	93
13) Carbon disulfide	8.02	76	10027	0.34	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L	# 91
15) MTBE	8.73	73	5033	0.57	ug/L	# 72
16) 1,1-Dichloroethane	8.92	63	5945	0.56	ug/L	97
17) Vinyl acetate	9.08	43	4816	0.58	ug/L	# 82
18) 2-Butanone (MEK)	9.46	72	199	0.70	ug/L	# 33
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	89
20) Bromochloromethane	9.87	128	1134	0.57	ug/L	# 90
21) Chloroform	9.93	83	4941	0.56	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.52	ug/L	98
24) 1,2-Dichloroethane	10.77	62	2927	0.56	ug/L	# 76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.50	ug/L	# 55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	96
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.55	ug/L	100
30) Dibromomethane	12.17	93	1308	0.54	ug/L	# 86
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L	99
32) Trichloroethene	12.27	95	2709	0.53	ug/L	97
33) Bromodichloromethane	12.33	83	3018	0.51	ug/L	# 99
34) 2-Chlorovinylethylether	12.87	63	774	0.56	ug/L	# 56
35) cis-1,3-Dichloropropene	13.18	75	3500	0.49	ug/L	# 88
36) 4-Methyl-2-pentanone (MIBK)	0.00	43	0	N.D.	d	
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L	# 69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.50	ug/L	# 82
40) Toluene	14.21	92	6374	0.56	ug/L	98
42) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031411.M Thu Mar 17 13:56:36 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:56 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
43) 2-Hexanone	0.00	43	0	N.D.	d		
44) Dibromochloromethane	14.65	129	2052	0.64	ug/L	84	
45) 1,2-Dibromoethane	14.98	107	1293	0.48	ug/L	#	76
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L		97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.59	ug/L	#	56
48) Chlorobenzene	16.12	112	6227	0.54	ug/L		97
49) Ethylbenzene	16.38	91	11848	0.56	ug/L		94
50) m,p-Xylenes	16.64	106	4453	0.60	ug/L		94
51) Styrene	17.10	104	5086	0.44	ug/L	#	77
52) o-Xylene	17.20	106	4214	0.58	ug/L		99
55) Bromoform	16.81	173	803m	0.49	ug/L		
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	#	96
57) 1,2,3-Trichloropropane	17.38	110	276	0.38	ug/L	#	59
58) Isopropylbenzene	17.70	105	9284	0.51	ug/L		98
59) Bromobenzene	18.05	156	1904	0.47	ug/L		85
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L		96
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L		93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L		99
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.52	ug/L		98
64) tert-Butylbenzene	19.09	119	6647	0.50	ug/L		97
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.51	ug/L		100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L		94
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L		87
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	#	94
69) p-Isopropyltoluene	19.61	119	8395	0.48	ug/L		97
70) 1,2-Dichlorobenzene	20.02	146	3885	0.55	ug/L		99
71) n-Butylbenzene	20.11	91	9466	0.49	ug/L		99
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	d		
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.42	ug/L		81
74) Naphthalene	22.63	128	4307	0.67	ug/L		100
75) Hexachlorobutadiene	22.69	225	1446	Below Cal	#		66
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.46	ug/L		87

(#) = qualifier out of range (m) = manual integration  
 03171106.D 031411.M Thu Mar 17 13:56:37 2011

Quantitation Report

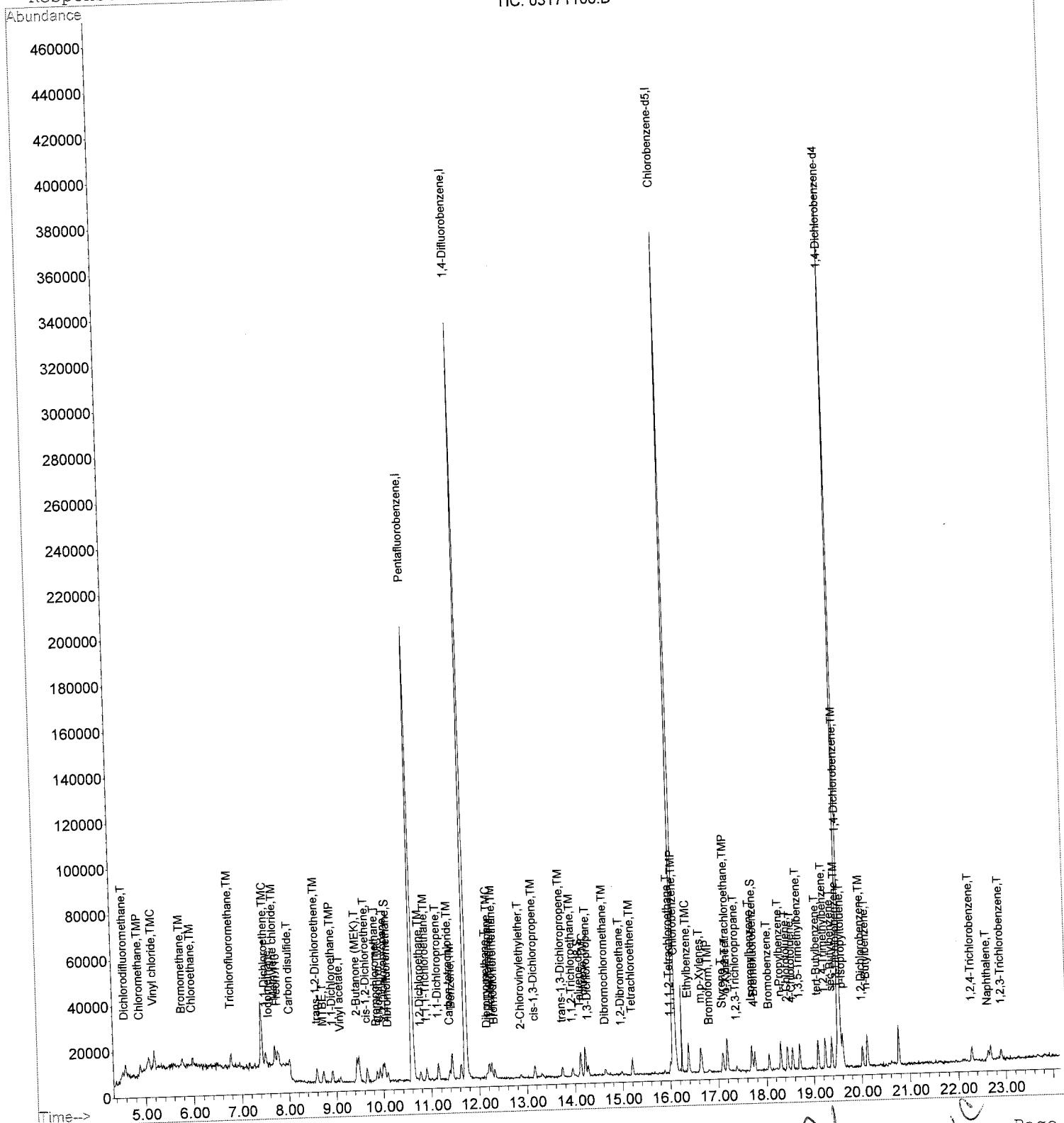
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D  
 Acq On : 17 Mar 2011 9:12 am  
 Sample : 0.5 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:56 2011

Vial: 3  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

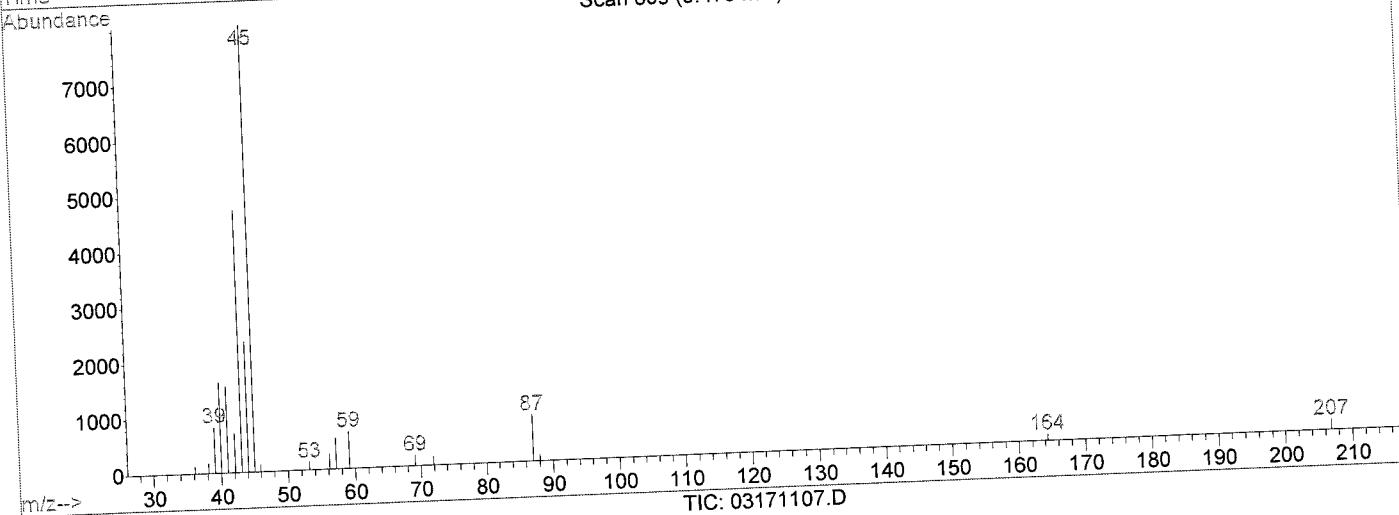
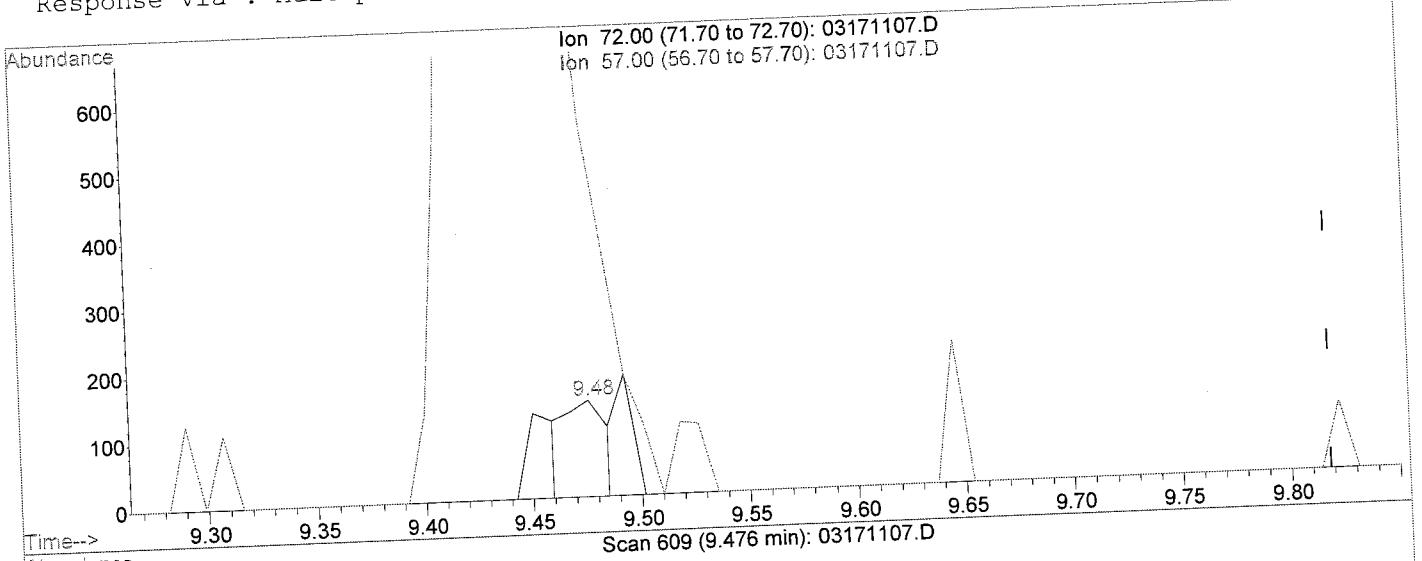
TIC: 03171106.D



Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:56 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.48min 0.69ug/L

response 190

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

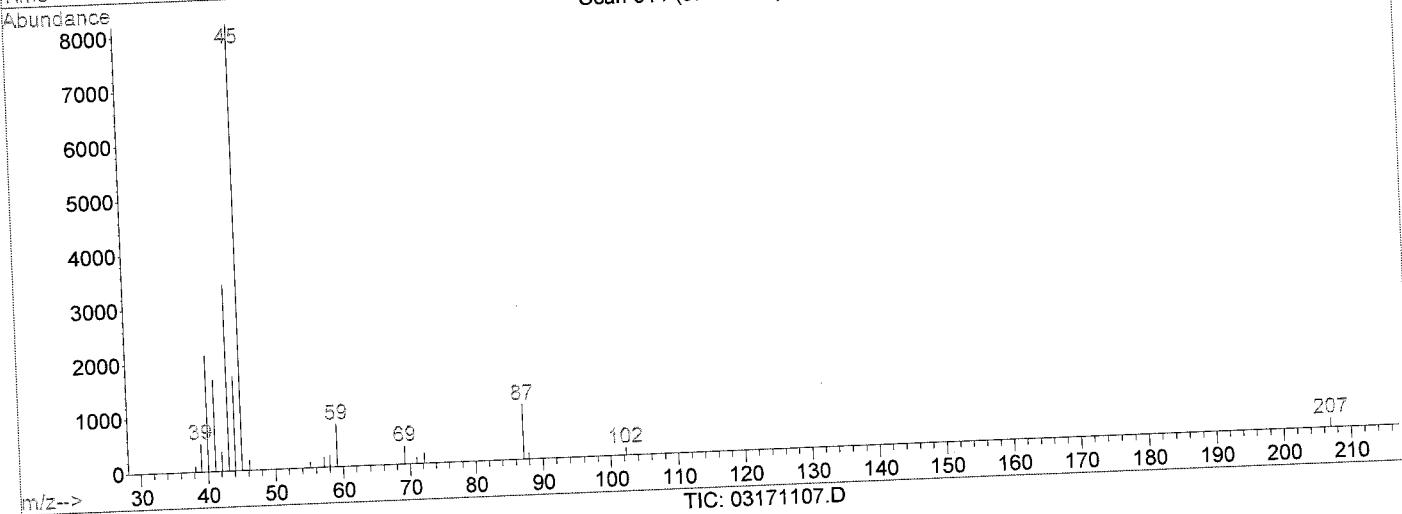
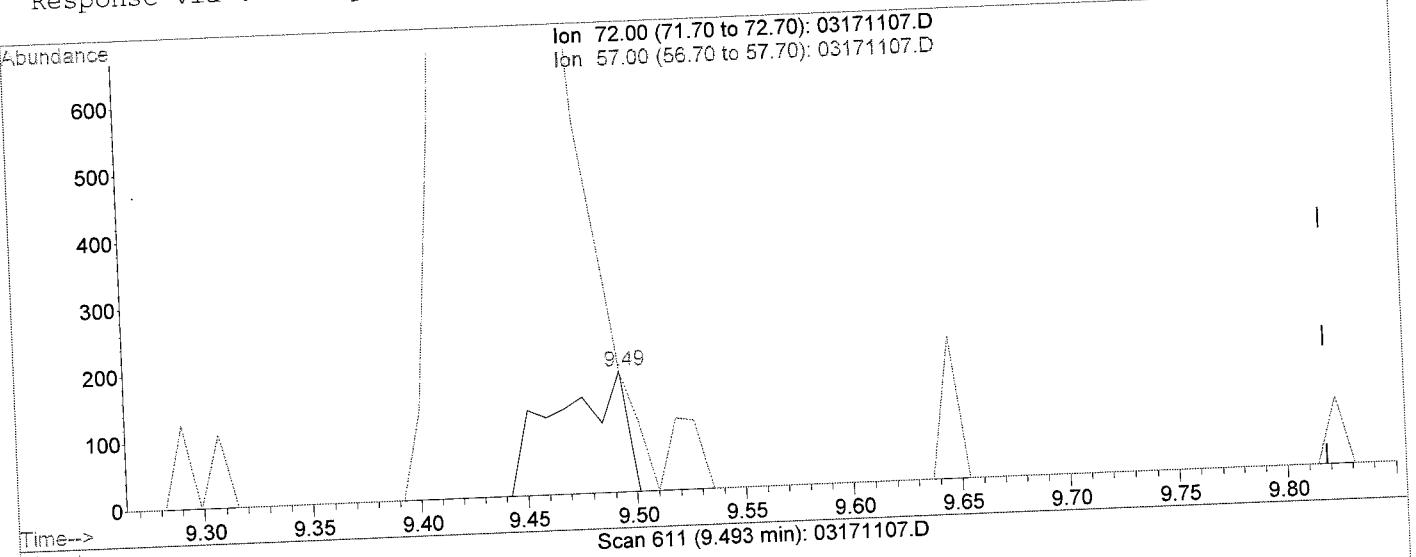
Before - NIP

03/18/11

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:57 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(18) 2-Butanone (MEK) (T)

9.49min 1.46ug/L m

response 405

Ion	Exp%	Act%
72.00	100	100
57.00	3347.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

After

Ver 03/18/11

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:57 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	163969	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	3898	1.00	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.00%		
39) Toluene-d8	14.12	98	14880	1.07	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.28%		
53) 4-Bromofluorobenzene	17.76	95	5477	1.10	ug/L	0.00
Spiked Amount 25.000			Recovery =	4.40%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.58	85	7417	0.94	ug/L	95
3) Chloromethane	4.89	50	11297	1.01	ug/L	99
4) Vinyl chloride	5.18	62	11731	1.07	ug/L #	84
5) Bromomethane	5.77	94	5200	1.07	ug/L	90
6) Chloroethane	5.98	64	6815	1.17	ug/L	90
7) Trichlorofluoromethane	6.77	101	8152	1.00	ug/L	92
8) Acetone	0.00	43	0	N.D. d		
9) Iodomethane	7.57	142	3864	1.02	ug/L #	83
10) 1,1-Dichloroethene	7.51	96	5486	1.05	ug/L	95
11) Methylene chloride	7.70	84	6767	1.24	ug/L	93
12) Freon 113	7.78	101	6284	1.18	ug/L	96
13) Carbon disulfide	8.02	76	17829	0.89	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	6106	1.20	ug/L	83
15) MTBE	8.73	73	10605	1.24	ug/L #	88
16) 1,1-Dichloroethane	8.92	63	12255	1.17	ug/L #	97
17) Vinyl acetate	9.09	43	9903	1.23	ug/L #	92
18) 2-Butanone (MEK)	9.49	72	405m	1.46	ug/L	
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L	96
20) Bromochloromethane	9.88	128	2006	1.03	ug/L	96
21) Chloroform	9.93	83	8465	0.98	ug/L	99
22) 2,2-Dichloropropane	10.03	77	6968	0.97	ug/L	92
24) 1,2-Dichloroethane	10.78	62	5936	1.16	ug/L #	76
25) 1,1,1-Trichloroethane	10.90	97	6150	0.95	ug/L	95
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L #	94
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L	98
29) Benzene	11.44	78	20409	1.03	ug/L	96
30) Dibromomethane	12.17	93	2529	1.07	ug/L	96
31) 1,2-Dichloropropane	12.21	63	5383	0.97	ug/L #	88
32) Trichloroethene	12.26	95	4847	0.97	ug/L	95
33) Bromodichloromethane	12.32	83	5644	0.97	ug/L	87
34) 2-Chlorovinylethylether	12.86	63	1739	1.28	ug/L #	82
35) cis-1,3-Dichloropropene	13.18	75	6952	0.99	ug/L	94
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.11	ug/L #	89
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	2621	0.97	ug/L #	82
40) Toluene	14.22	92	10459	0.94	ug/L	91
42) 1,3-Dichloropropane	14.27	76	5543	0.99	ug/L #	73

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

VC 03/18/11

## Quantitation Report (QT Reviewed)

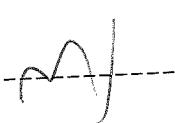
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:57 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.31	ug/L	# 77
44) Dibromochloromethane	14.65	129	2863	0.89	ug/L	98
45) 1,2-Dibromoethane	14.98	107	2446	0.90	ug/L	# 78
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	93
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.03	ug/L	# 58
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	92
49) Ethylbenzene	16.38	91	20598	0.97	ug/L	99
50) m,p-Xylenes	16.64	106	6910	0.93	ug/L	92
51) Styrene	17.10	104	10355	0.90	ug/L	98
52) o-Xylene	17.20	106	7210	1.00	ug/L	90
55) Bromoform	16.81	173	1545	0.97	ug/L	# 72
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L	# 89
57) 1,2,3-Trichloropropane	17.38	110	807	1.14	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.92	ug/L	100
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.96	ug/L	99
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	96
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.94	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.95	ug/L	97
66) sec-Butylbenzene	19.38	105	21187	0.96	ug/L	93
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	98
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	98
69) p-Isopropyltoluene	19.61	119	15312	0.90	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.96	ug/L	96
71) n-Butylbenzene	20.11	91	17346	0.92	ug/L	89
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.90	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	4683	0.95	ug/L	100
74) Naphthalene	22.63	128	5978	0.95	ug/L	90
75) Hexachlorobutadiene	22.68	225	2850	0.43	ug/L	94
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.84	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031411.M Thu Mar 17 13:57:42 2011

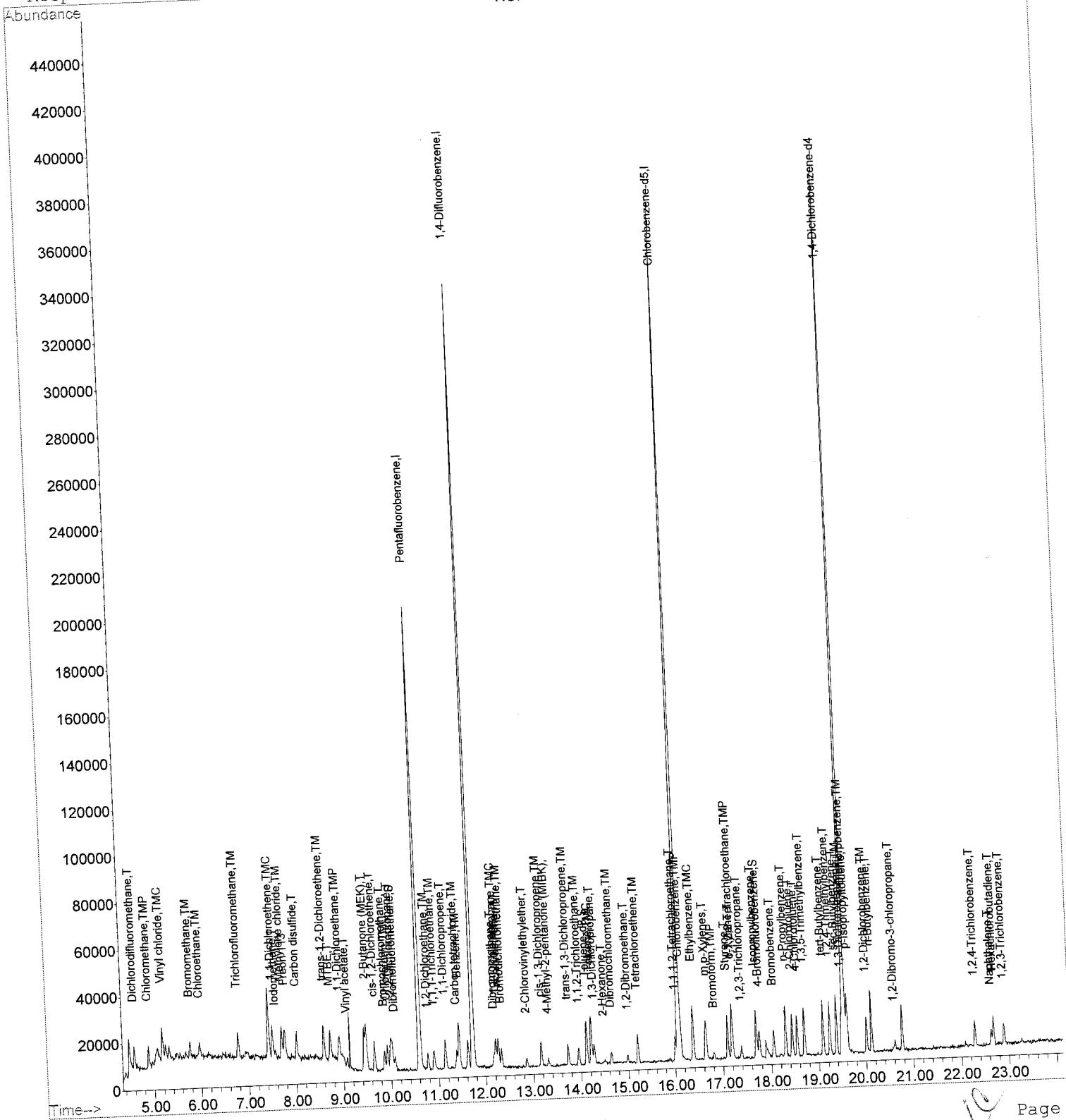

 Page

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
Acq On : 17 Mar 2011 9:43 am Operator: LC  
Sample : 1.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
Quant Time: Mar 17 13:57 2011 (Run by Integrator)

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171107.D



03171107.D 031411.M

Thu Mar 17 13:57:42 2011

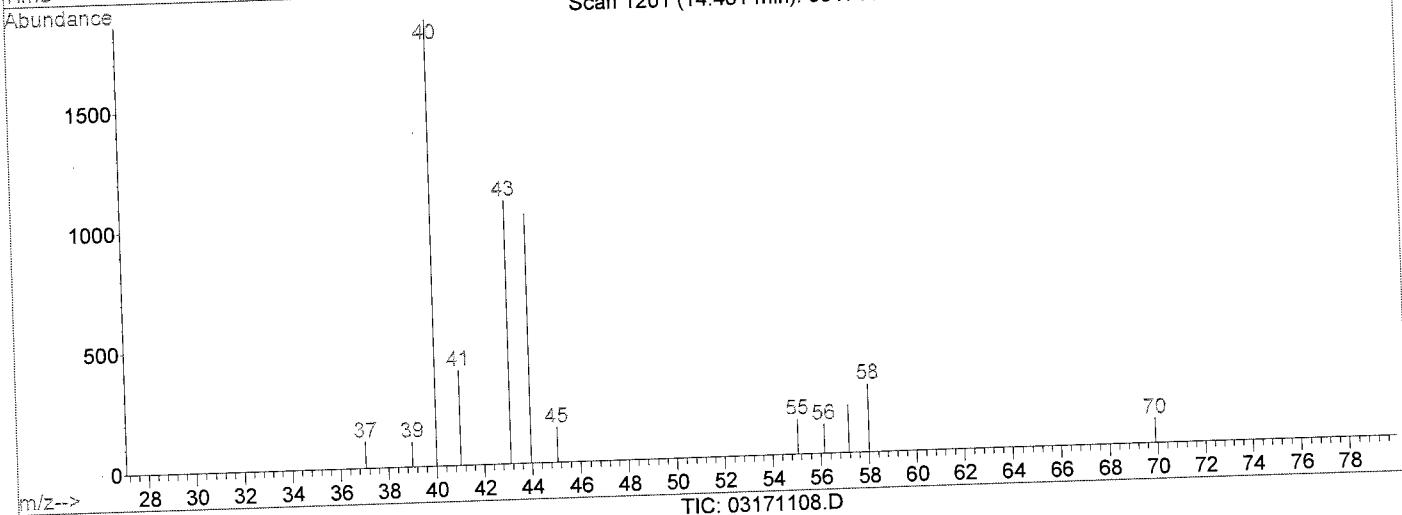
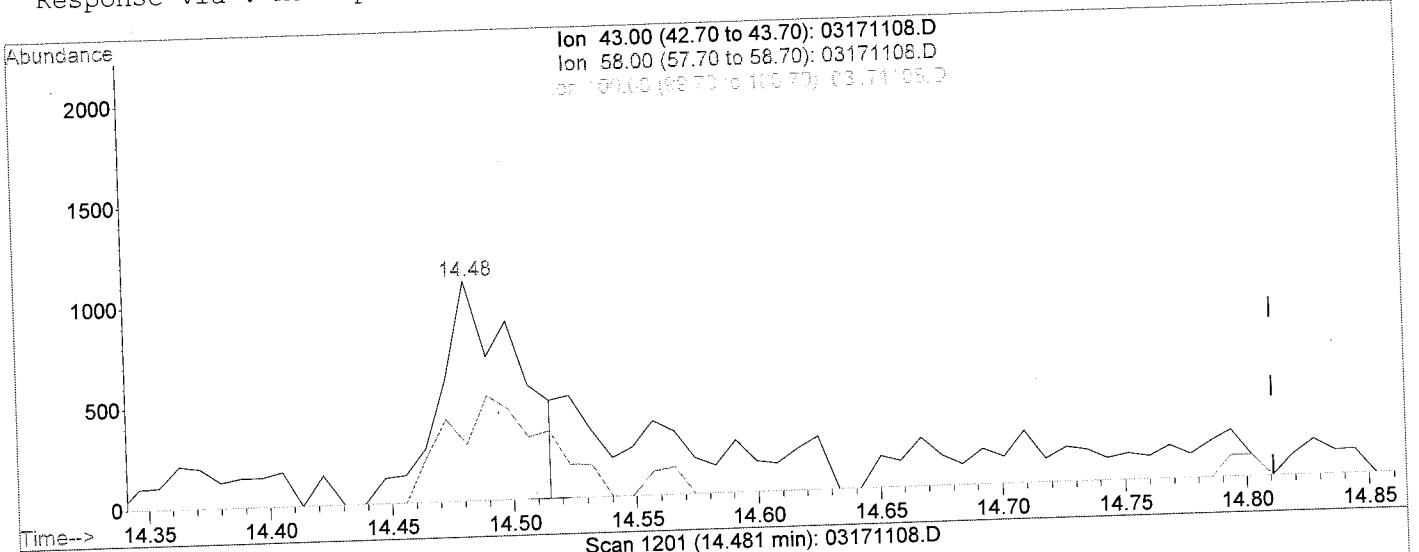
63 of 262

Page

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:57 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.28ug/L

response 2474

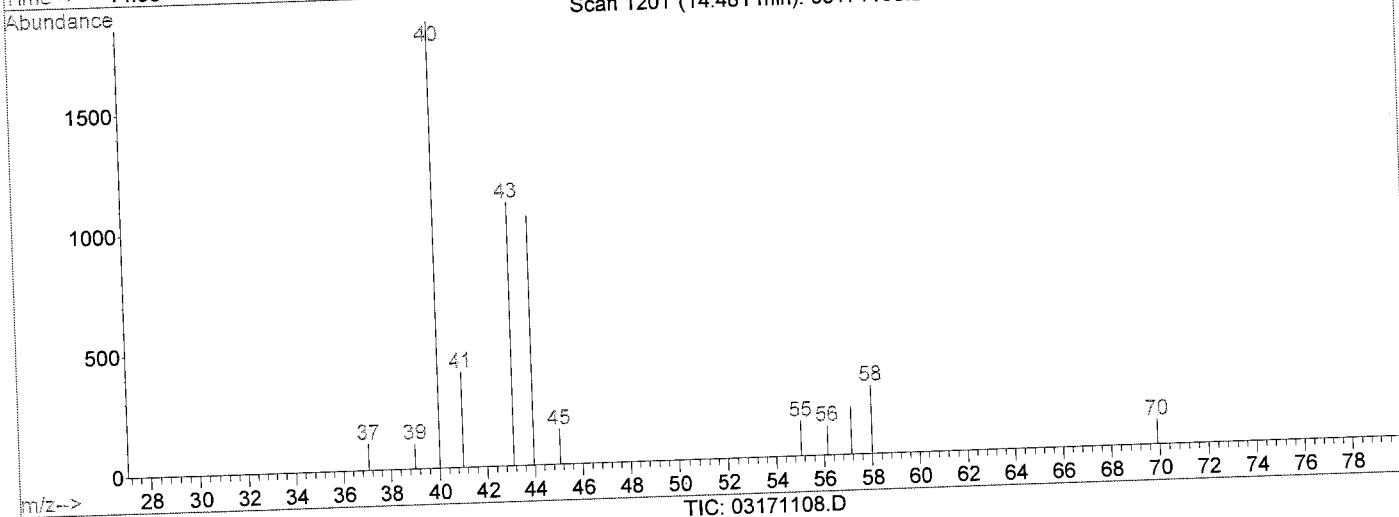
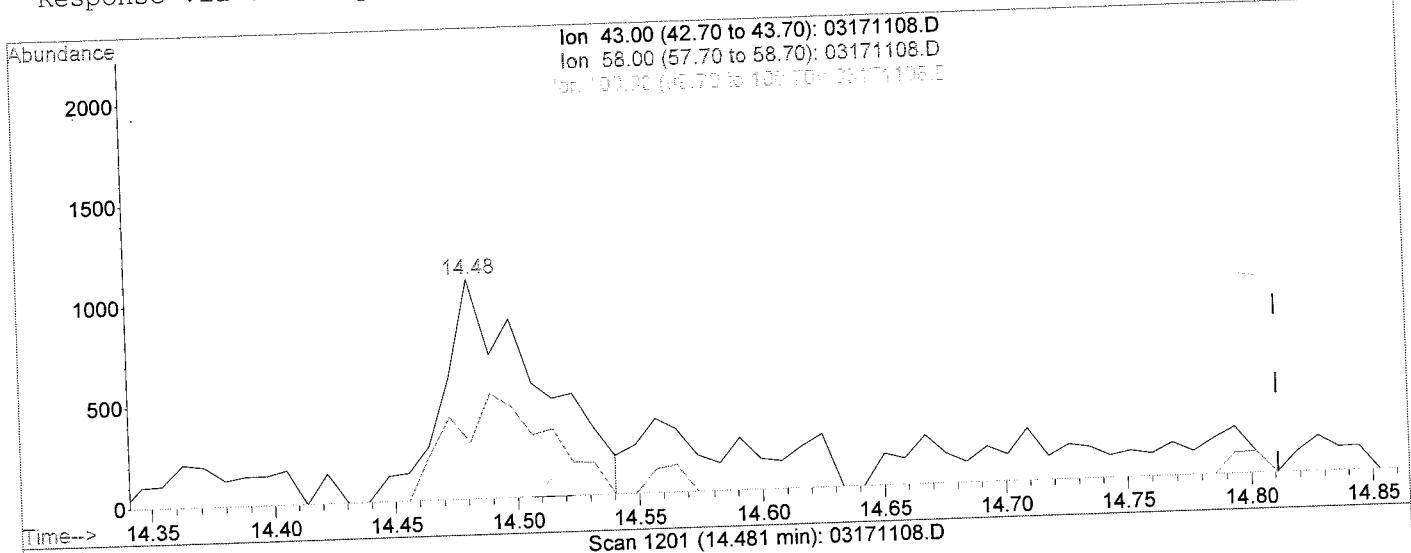
Ion	Exp%	Act%
43.00	100	100
58.00	43.50	39.81
100.00	0.00	0.00
0.00	0.00	0.00

Before - NIP

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: temp.res  
 Quant Time: Mar 17 13:59 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Multiple Level Calibration



(43) 2-Hexanone (T)

14.48min 1.55ug/L m

response 2999

Ion	Exp%	Act%
43.00	100	100
58.00	43.50	32.84#
100.00	0.00	0.00
0.00	0.00	0.00

After

3/18/11

✓

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	7767	1.95	ug/L	0.00
Spiked Amount 25.000			Recovery =	7.80%		
39) Toluene-d8	14.12	98	28802	2.04	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.16%		
53) 4-Bromofluorobenzene	17.75	95	10411	2.08	ug/L	0.00
Spiked Amount 25.000			Recovery =	8.32%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	15723	1.95	ug/L	94
3) Chloromethane	4.89	50	22795	2.00	ug/L	97
4) Vinyl chloride	5.18	62	22297	2.00	ug/L	95
5) Bromomethane	5.77	94	6970	1.41	ug/L	95
6) Chloroethane	5.98	64	11754	1.97	ug/L	# 85
7) Trichlorofluoromethane	6.78	101	16143	1.94	ug/L	100
8) Acetone	6.94	43	4997	2.62	ug/L	97
9) Iodomethane	7.57	142	5343	1.38	ug/L	96
10) 1,1-Dichloroethene	7.51	96	8308	1.69	ug/L	98
11) Methylene chloride	7.71	84	10726	1.93	ug/L	97
12) Freon 113	7.77	101	10221	1.89	ug/L	100
13) Carbon disulfide	8.03	76	30243	1.70	ug/L	97
14) trans-1,2-Dichloroethene	8.59	96	9562	1.85	ug/L	96
15) MTBE	8.73	73	16615	1.90	ug/L	99
16) 1,1-Dichloroethane	8.92	63	20516	1.93	ug/L	95
17) Vinyl acetate	9.08	43	14566	1.77	ug/L	# 1
18) 2-Butanone (MEK)	9.47	72	179	0.63	ug/L	91
19) cis-1,2-Dichloroethene	9.67	96	10907	2.03	ug/L	89
20) Bromochloromethane	9.88	128	3627	1.82	ug/L	95
21) Chloroform	9.93	83	18162	2.07	ug/L	96
22) 2,2-Dichloropropane	10.04	77	14030	1.91	ug/L	94
24) 1,2-Dichloroethane	10.78	62	10721	2.06	ug/L	# 94
25) 1,1,1-Trichloroethane	10.91	97	12034	1.83	ug/L	92
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	99
28) Carbon tetrachloride	11.38	117	9830	1.86	ug/L	94
29) Benzene	11.44	78	39494	1.97	ug/L	99
30) Dibromomethane	12.17	93	4597	1.92	ug/L	90
31) 1,2-Dichloropropane	12.22	63	10960	1.95	ug/L	# 94
32) Trichloroethene	12.27	95	9761	1.93	ug/L	94
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	96
34) 2-Chlorovinylethylether	12.87	63	2637	1.91	ug/L	# 85
35) cis-1,3-Dichloropropene	13.16	75	13465	1.88	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.68	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.85	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.91	ug/L	94
40) Toluene	14.21	92	22811	2.03	ug/L	97
42) 1,3-Dichloropropane	14.28	76	10418	1.86	ug/L	92

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031411.M Thu Mar 17 13:59:31 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2999m	1.55	ug/L	97
44) Dibromochloromethane	14.65	129	6238	1.94	ug/L	100
45) 1,2-Dibromoethane	14.99	107	5443	1.99	ug/L #	99
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	95
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.94	ug/L	90
48) Chlorobenzene	16.12	112	21803	1.89	ug/L	99
49) Ethylbenzene	16.38	91	40622	1.91	ug/L	99
50) m,p-Xylenes	16.64	106	14567	1.95	ug/L	100
51) Styrene	17.09	104	21955	1.91	ug/L	98
52) o-Xylene	17.19	106	14080	1.95	ug/L	95
55) Bromoform	16.81	173	2978	1.87	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	99
57) 1,2,3-Trichloropropane	17.40	110	1450	2.05	ug/L	99
58) Isopropylbenzene	17.69	105	34246	1.94	ug/L	98
59) Bromobenzene	18.05	156	7927	1.99	ug/L	99
60) n-Propylbenzene	18.30	91	47531	1.91	ug/L	99
61) 2-Chlorotoluene	18.44	91	27642	1.93	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	99
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.90	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.89	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.92	ug/L	96
66) sec-Butylbenzene	19.38	105	43119	1.97	ug/L	96
67) 1,3-Dichlorobenzene	19.48	146	16064	1.97	ug/L	96
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	97
69) p-Isopropyltoluene	19.61	119	32053	1.88	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	13744	1.99	ug/L	99
71) n-Butylbenzene	20.12	91	35106	1.86	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.24	ug/L #	75
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.70	ug/L	96
74) Naphthalene	22.63	128	10824	1.73	ug/L	100
75) Hexachlorobutadiene	22.68	225	5711	1.50	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.72	ug/L	94

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031411.M Thu Mar 17 13:59:31 2011

Quantitation Report

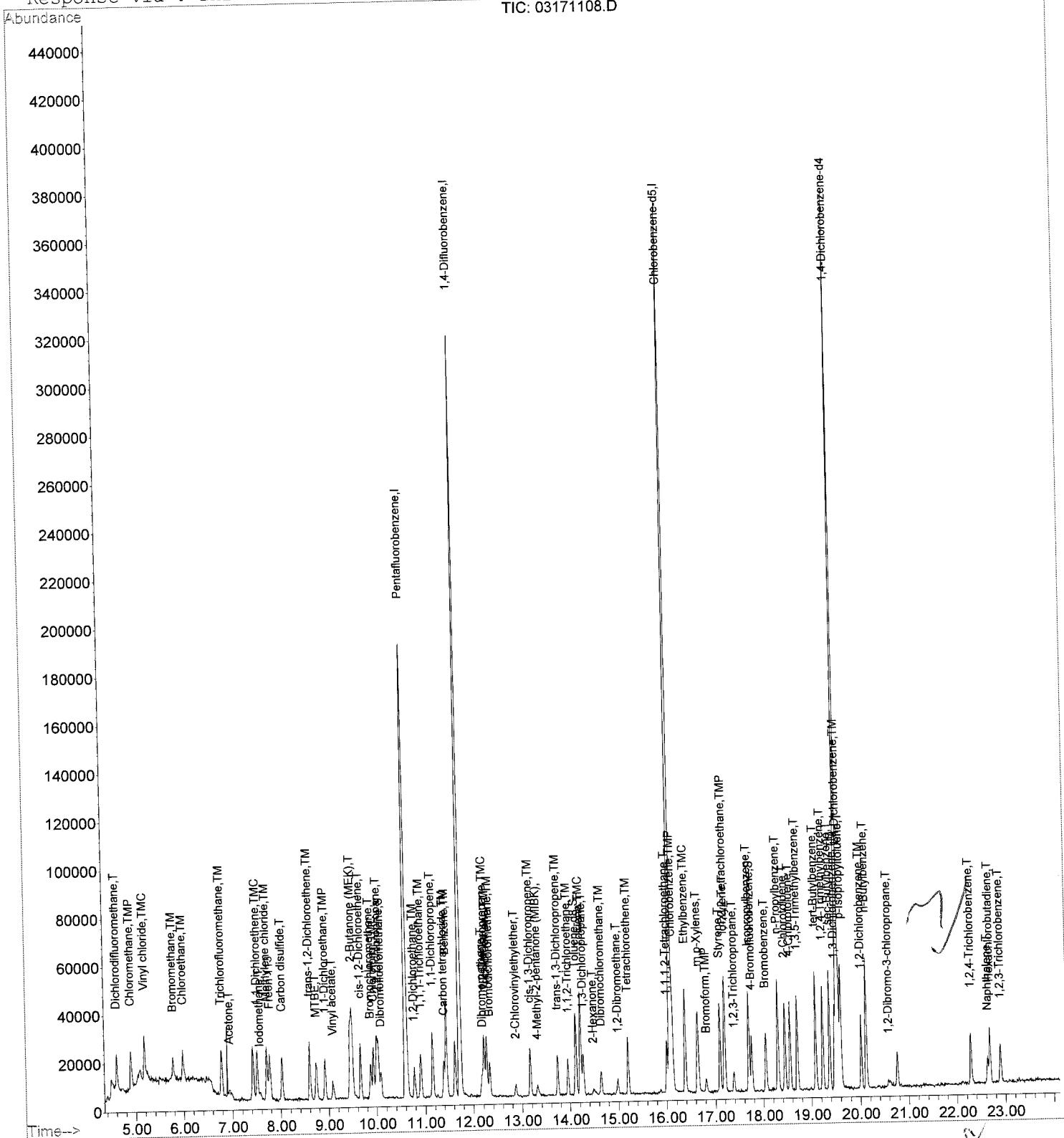
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171108.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	22772	5.84	ug/L	0.00
Spiked Amount 25.000			Recovery	=	23.36%	
39) Toluene-d8	14.12	98	75601	5.34	ug/L	0.00
Spiked Amount 25.000			Recovery	=	21.36%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.46	ug/L	0.00
Spiked Amount 25.000			Recovery	=	21.84%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	43993	5.56	ug/L	98
3) Chloromethane	4.90	50	69304	6.20	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.46	ug/L	97
5) Bromomethane	5.77	94	23286	4.82	ug/L	97
6) Chloroethane	5.98	64	31380	5.37	ug/L	97
7) Trichlorofluoromethane	6.78	101	44900	5.49	ug/L	98
8) Acetone	6.94	43	8551	5.67	ug/L	96
9) Iodomethane	7.57	142	19144	5.06	ug/L	100
10) 1,1-Dichloroethene	7.51	96	23635	5.45	ug/L	96
11) Methylene chloride	7.71	84	29505	5.41	ug/L	98
12) Freon 113	7.78	101	28220	5.32	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.75	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.39	ug/L	89
15) MTBE	8.74	73	47481	5.54	ug/L	98
16) 1,1-Dichloroethane	8.92	63	57409	5.51	ug/L	100
17) Vinyl acetate	9.09	43	45219	5.60	ug/L	97
18) 2-Butanone (MEK)	9.47	72	1224	4.43	ug/L #	38
19) cis-1,2-Dichloroethene	9.66	96	29437	5.59	ug/L	93
20) Bromochloromethane	9.87	128	11063	5.67	ug/L	98
21) Chloroform	9.93	83	49311	5.72	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.50	ug/L	98
24) 1,2-Dichloroethane	10.78	62	29254	5.73	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.44	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.37	ug/L	98
29) Benzene	11.44	78	106054	5.27	ug/L	99
30) Dibromomethane	12.17	93	12758	5.32	ug/L	96
31) 1,2-Dichloropropane	12.21	63	30926	5.49	ug/L	98
32) Trichloroethene	12.26	95	27719	5.47	ug/L	93
33) Bromodichloromethane	12.33	83	32710	5.51	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.30	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	39480	5.52	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	4.84	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.29	ug/L	99
40) Toluene	14.21	92	60380	5.37	ug/L	100
42) 1,3-Dichloropropane	14.27	76	31749	5.61	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031411.M Thu Mar 17 14:00:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 13:59 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.44	ug/L	# 92
44) Dibromochloromethane	14.64	129	17145	5.27	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.75	ug/L	# 97
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.20	ug/L	97
48) Chlorobenzene	16.12	112	60084	5.16	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.23	ug/L	100
50) m,p-Xylenes	16.64	106	39718	5.25	ug/L	100
51) Styrene	17.09	104	62548	5.37	ug/L	99
52) o-Xylene	17.20	106	38050	5.20	ug/L	99
55) Bromoform	16.81	173	9209	5.63	ug/L	92
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	4203	5.79	ug/L	86
58) Isopropylbenzene	17.69	105	91339	5.05	ug/L	98
59) Bromobenzene	18.05	156	21568	5.28	ug/L	97
60) n-Propylbenzene	18.30	91	134531	5.26	ug/L	100
61) 2-Chlorotoluene	18.45	91	75803	5.15	ug/L	98
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.14	ug/L	97
64) tert-Butylbenzene	19.09	119	66536	5.03	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.03	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.13	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	42641	5.08	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.00	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	38242	5.39	ug/L	98
71) n-Butylbenzene	20.12	91	99714	5.16	ug/L	95
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.80	ug/L	99
73) 1,2,4-Trichlorobenzene	22.28	180	24323	4.82	ug/L	100
74) Naphthalene	22.63	128	32491	5.06	ug/L	99
75) Hexachlorobutadiene	22.68	225	14709	4.71	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	20581	4.91	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031411.M Thu Mar 17 14:00:04 2011

Quantitation Report

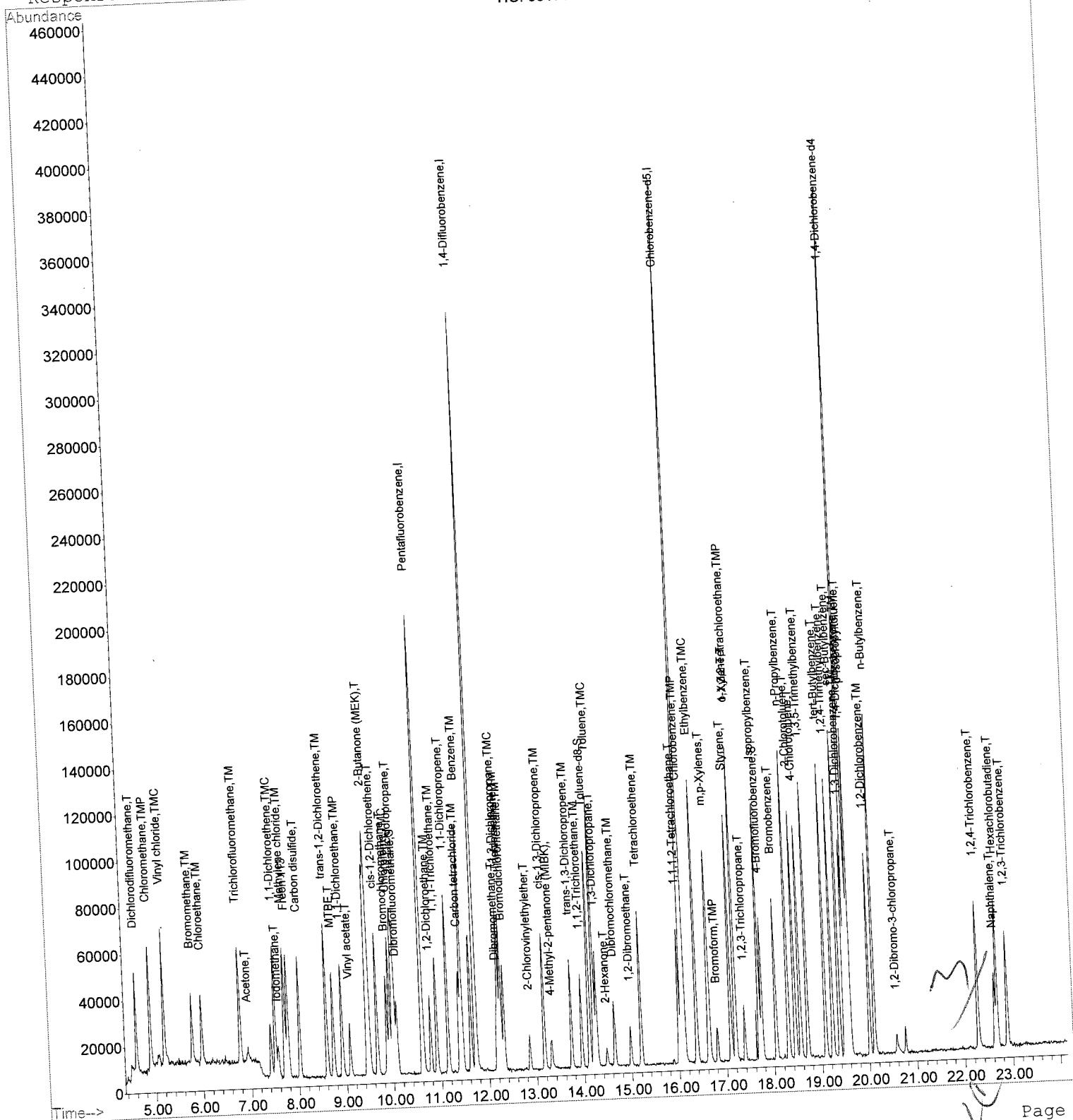
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D  
 Acq On : 17 Mar 2011 10:45 am  
 Sample : 5.0 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 13:59 2011

Vial: 6  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171109.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	42710	10.76	ug/L	0.00
Spiked Amount 25.000			Recovery =	43.04%		
39) Toluene-d8	14.12	98	143321	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery =	40.72%		
53) 4-Bromofluorobenzene	17.75	95	50923	10.16	ug/L	0.00
Spiked Amount 25.000			Recovery =	40.64%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	79957	9.93	ug/L	100
3) Chloromethane	4.89	50	135497	11.91	ug/L	99
4) Vinyl chloride	5.19	62	111850	10.07	ug/L	100
5) Bromomethane	5.78	94	53427	10.86	ug/L	91
6) Chloroethane	5.98	64	63788	10.72	ug/L	98
7) Trichlorofluoromethane	6.78	101	85392	10.27	ug/L	99
8) Acetone	6.94	43	11502	8.08	ug/L	97
9) Iodomethane	7.57	142	36401	9.45	ug/L	95
10) 1,1-Dichloroethene	7.51	96	46909	10.89	ug/L	94
11) Methylene chloride	7.71	84	55460	9.98	ug/L	99
12) Freon 113	7.78	101	52409	9.70	ug/L	99
13) Carbon disulfide	8.03	76	162804	10.64	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.90	ug/L	94
15) MTBE	8.74	73	84759	9.71	ug/L	96
16) 1,1-Dichloroethane	8.92	63	108838	10.26	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.96	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	9.44	ug/L	88
19) cis-1,2-Dichloroethene	9.66	96	53573	9.99	ug/L	98
20) Bromochloromethane	9.88	128	20976	10.55	ug/L	100
21) Chloroform	9.93	83	95119	10.84	ug/L	100
22) 2,2-Dichloropropane	10.04	77	73939	10.10	ug/L	98
24) 1,2-Dichloroethane	10.77	62	53618	10.31	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	66517	10.14	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.21	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.31	ug/L	98
29) Benzene	11.44	78	201076	10.05	ug/L	100
30) Dibromomethane	12.17	93	24596	10.31	ug/L	96
31) 1,2-Dichloropropane	12.21	63	55294	9.87	ug/L	100
32) Trichloroethene	12.27	95	49861	9.89	ug/L	98
33) Bromodichloromethane	12.33	83	60334	10.22	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	9.32	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	73950	10.38	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.23	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.24	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	27640	10.13	ug/L	97
40) Toluene	14.21	92	114354	10.22	ug/L	100
42) 1,3-Dichloropropane	14.27	76	56624	10.10	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031411.M Thu Mar 17 14:00:50 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.10	ug/L	# 96
44) Dibromochloromethane	14.64	129	32389	10.06	ug/L	100
45) 1,2-Dibromoethane	14.98	107	28536	10.44	ug/L	98
46) Tetrachloroethene	15.21	166	44478	10.14	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	10.14	ug/L	99
48) Chlorobenzene	16.12	112	113625	9.85	ug/L	100
49) Ethylbenzene	16.38	91	215370	10.13	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.90	ug/L	98
51) Styrene	17.09	104	115227	9.99	ug/L	98
52) o-Xylene	17.20	106	71920	9.92	ug/L	97
55) Bromoform	16.81	173	16316	10.52	ug/L	96
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 99
57) 1,2,3-Trichloropropane	17.39	110	7243	10.53	ug/L	96
58) Isopropylbenzene	17.69	105	176438	10.28	ug/L	100
59) Bromobenzene	18.05	156	40825	10.54	ug/L	98
60) n-Propylbenzene	18.30	91	250684	10.34	ug/L	100
61) 2-Chlorotoluene	18.45	91	143783	10.30	ug/L	99
62) 4-Chlorotoluene	18.55	91	141563	10.15	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.35	ug/L	98
64) tert-Butylbenzene	19.09	119	128292	10.22	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.05	ug/L	100
66) sec-Butylbenzene	19.37	105	214687	10.06	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	80400	10.10	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	99
69) p-Isopropyltoluene	19.61	119	168592	10.18	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	69024	10.25	ug/L	100
71) n-Butylbenzene	20.12	91	183374	10.00	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	11.01	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	41924	8.76	ug/L	100
74) Naphthalene	22.63	128	55616	9.13	ug/L	99
75) Hexachlorobutadiene	22.68	225	29027	10.49	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	34759	8.75	ug/L	99

M

V

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031411.M Thu Mar 17 14:00:50 2011

Page

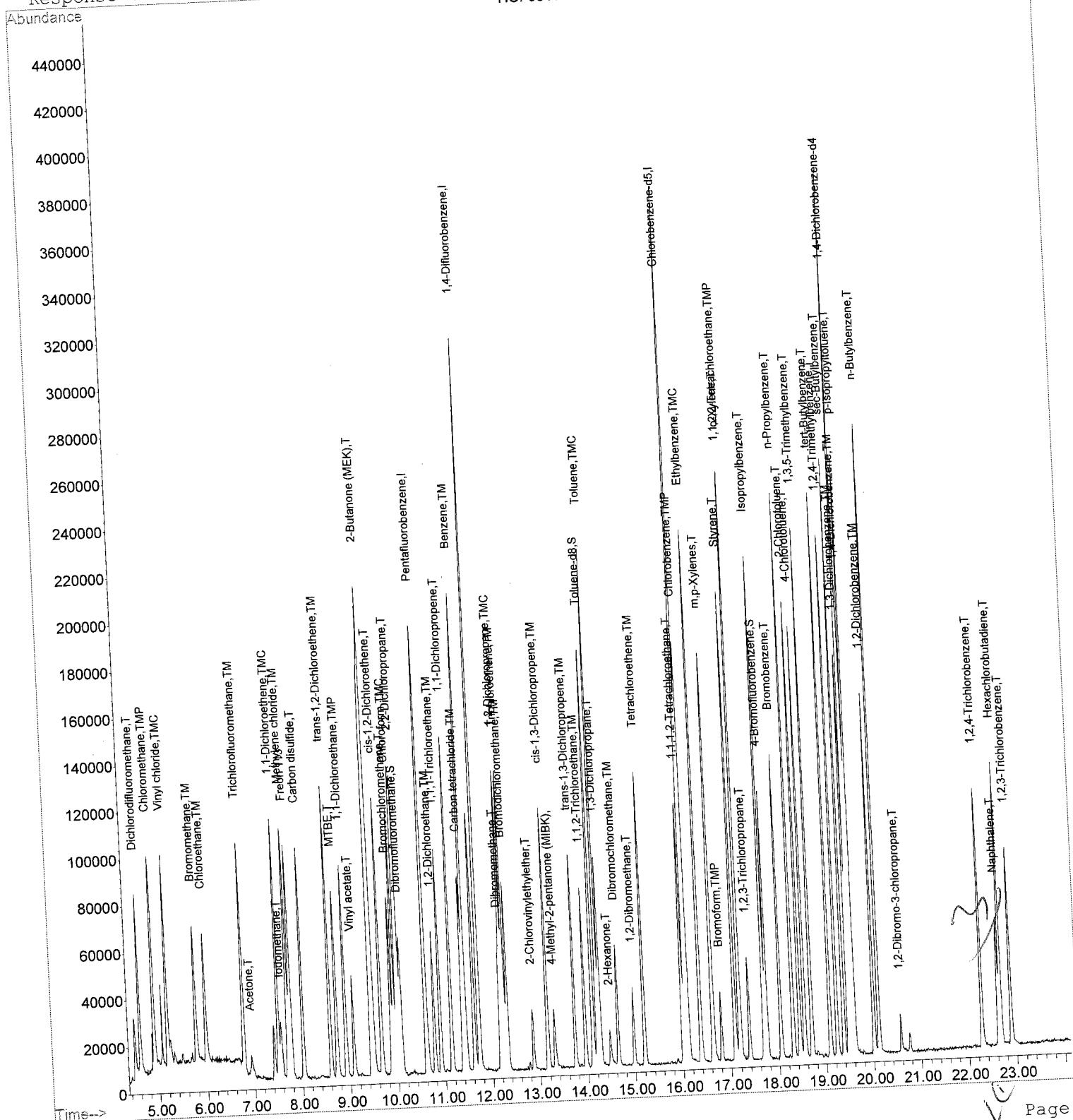
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA  
Acq On : 17 Mar 2011 11:15 am  
Sample : 10 PPB  
Misc :  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:00 2011

Vial: 7  
Operator: LC  
Inst : GCMS7  
Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	103380	26.41	ug/L	0.00
Spiked Amount 25.000			Recovery =	105.64%		
39) Toluene-d8	14.12	98	359841	25.92	ug/L	0.00
Spiked Amount 25.000			Recovery =	103.68%		
53) 4-Bromofluorobenzene	17.75	95	128707	25.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	103.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	200064	25.20	ug/L	98
3) Chloromethane	4.89	50	322628	28.77	ug/L	99
4) Vinyl chloride	5.18	62	283499	25.90	ug/L	100
5) Bromomethane	5.78	94	141242	29.13	ug/L	96
6) Chloroethane	5.98	64	150117	25.60	ug/L	98
7) Trichlorofluoromethane	6.78	101	214158	26.12	ug/L	99
8) Acetone	6.94	43	25928	23.73	ug/L	98
9) Iodomethane	7.57	142	98109	25.84	ug/L	97
10) 1,1-Dichloroethene	7.51	96	111502	26.67	ug/L	98
11) Methylene chloride	7.71	84	132209	24.14	ug/L	99
12) Freon 113	7.77	101	133636	25.10	ug/L	98
13) Carbon disulfide	8.03	76	401884	27.15	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.92	ug/L	98
15) MTBE	8.74	73	214946	24.98	ug/L	99
16) 1,1-Dichloroethane	8.92	63	264682	25.31	ug/L	99
17) Vinyl acetate	9.08	43	202265	24.98	ug/L	99
18) 2-Butanone (MEK)	9.47	72	6903	24.88	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	131490	24.87	ug/L	99
20) Bromochloromethane	9.87	128	47437	24.21	ug/L	94
21) Chloroform	9.93	83	218360	25.26	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	24.96	ug/L	98
24) 1,2-Dichloroethane	10.78	62	136474	26.62	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	162207	25.09	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.70	ug/L	99
28) Carbon tetrachloride	11.39	117	133369	25.74	ug/L	100
29) Benzene	11.44	78	490622	24.87	ug/L	99
30) Dibromomethane	12.17	93	58067	24.68	ug/L	98
31) 1,2-Dichloropropane	12.21	63	140014	25.35	ug/L	99
32) Trichloroethene	12.27	95	124690	25.08	ug/L	98
33) Bromodichloromethane	12.33	83	150764	25.89	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	21.41	ug/L	98
35) cis-1,3-Dichloropropene	13.16	75	183565	26.14	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	23.09	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.77	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	24.66	ug/L	98
40) Toluene	14.21	92	282149	25.56	ug/L	98
42) 1,3-Dichloropropane	14.27	76	140210	25.26	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031411.M Thu Mar 17 14:01:22 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	23.20	ug/L	# 93
44) Dibromochloromethane	14.64	129	81864	25.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	70424	26.01	ug/L	99
46) Tetrachloroethene	15.21	166	109364	25.16	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	25.31	ug/L	97
48) Chlorobenzene	16.12	112	284407	24.90	ug/L	99
49) Ethylbenzene	16.37	91	538674	25.57	ug/L	99
50) m,p-Xylenes	16.64	106	186494	25.11	ug/L	99
51) Styrene	17.09	104	295005	25.82	ug/L	99
52) o-Xylene	17.19	106	177920	24.79	ug/L	97
55) Bromoform	16.81	173	42372	26.71	ug/L	95
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	24.99	ug/L	98
57) 1,2,3-Trichloropropane	17.38	110	18834	26.78	ug/L	95
58) Isopropylbenzene	17.69	105	445254	25.36	ug/L	100
59) Bromobenzene	18.05	156	105054	26.51	ug/L	98
60) n-Propylbenzene	18.30	91	632559	25.51	ug/L	99
61) 2-Chlorotoluene	18.44	91	364433	25.52	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.87	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.55	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.26	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.14	ug/L	99
66) sec-Butylbenzene	19.37	105	556785	25.52	ug/L	99
67) 1,3-Dichlorobenzene	19.48	146	205642	25.27	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	201942	24.80	ug/L	99
69) p-Isopropyltoluene	19.61	119	434002	25.61	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.97	ug/L	99
71) n-Butylbenzene	20.12	91	487367	26.00	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	26.23	ug/L	95
73) 1,2,4-Trichlorobenzene	22.28	180	122376	25.01	ug/L	99
74) Naphthalene	22.63	128	163821	26.30	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	28.14	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	101564	24.99	ug/L	100

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 (#) = qualifier out of range (m) = manual integration  
 03171111.D 031411.M Thu Mar 17 14:01:22 2011

Page 2

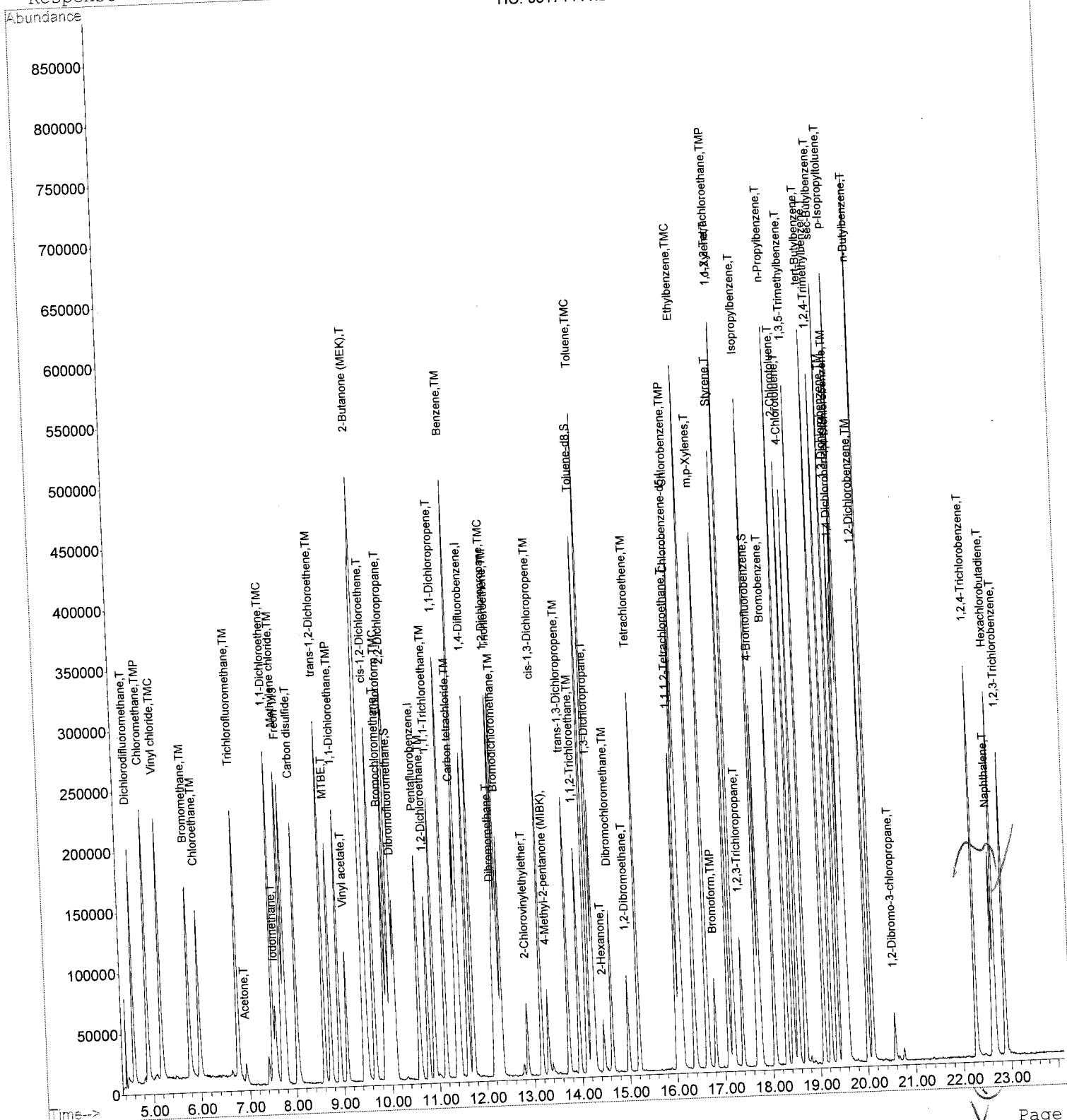
76 of 262

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:00 2011 Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:00 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171111.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:01 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Dibromofluoromethane	10.09	113	202044	49.12	ug/L	0.00
Spiked Amount 25.000			Recovery = 196.48%			
39) Toluene-d8	14.11	98	726789	50.32	ug/L	0.00
Spiked Amount 25.000			Recovery = 201.28%			
53) 4-Bromofluorobenzene	17.76	95	259969	50.54	ug/L	0.00
Spiked Amount 25.000			Recovery = 202.16%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	391099	46.88	ug/L	100
3) Chloromethane	4.90	50	687656	58.35	ug/L	100
4) Vinyl chloride	5.18	62	596978	51.89	ug/L	98
5) Bromomethane	5.78	94	296252	58.13	ug/L	98
6) Chloroethane	5.99	64	300876	48.83	ug/L	97
7) Trichlorofluoromethane	6.78	101	340516	39.53	ug/L	98
8) Acetone	6.93	43	44278	Below Cal		99
9) Iodomethane	7.58	142	195341	48.96	ug/L	99
10) 1,1-Dichloroethene	7.52	96	220268	50.38	ug/L	97
11) Methylene chloride	7.71	84	264019	45.88	ug/L	99
12) Freon 113	7.78	101	262900	47.00	ug/L	99
13) Carbon disulfide	8.03	76	807912	52.24	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.50	ug/L	98
15) MTBE	8.73	73	407385	45.06	ug/L	98
16) 1,1-Dichloroethane	8.92	63	517515	47.09	ug/L	100
17) Vinyl acetate	9.08	43	400997	47.13	ug/L	100
18) 2-Butanone (MEK)	9.47	72	13656	46.83	ug/L	100
19) cis-1,2-Dichloroethene	9.66	96	257331	46.32	ug/L	99
20) Bromochloromethane	9.87	128	96376	46.81	ug/L	98
21) Chloroform	9.93	83	424654	46.74	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.12	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	48.57	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	323769	47.65	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.22	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	49.71	ug/L	100
29) Benzene	11.44	78	1008066	49.11	ug/L	99
30) Dibromomethane	12.17	93	116662	47.65	ug/L	97
31) 1,2-Dichloropropane	12.21	63	281688	49.02	ug/L	99
32) Trichloroethene	12.26	95	255144	49.32	ug/L	98
33) Bromodichloromethane	12.33	83	300337	49.57	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	37.02	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	364674	49.91	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	44.54	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.71	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	47.11	ug/L	97
40) Toluene	14.22	92	583744	50.83	ug/L	100
42) 1,3-Dichloropropane	14.27	76	277506	48.23	ug/L	99

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031411.M Thu Mar 17 14:02:05 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:01 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	48.63	ug/L	# 100
44) Dibromochloromethane	14.65	129	168655	51.01	ug/L	99
45) 1,2-Dibromoethane	14.98	107	142279	50.69	ug/L	99
46) Tetrachloroethene	15.20	166	223148	49.54	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	50.19	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.72	ug/L	99
49) Ethylbenzene	16.38	91	1095906	50.20	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.92	ug/L	97
51) Styrene	17.10	104	602783	50.90	ug/L	100
52) o-Xylene	17.20	106	366193	49.22	ug/L	100
55) Bromoform	16.82	173	87491	53.39	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.00	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	51.09	ug/L	99
58) Isopropylbenzene	17.70	105	904235	49.87	ug/L	99
59) Bromobenzene	18.05	156	210716	51.49	ug/L	98
60) n-Propylbenzene	18.30	91	1279523	49.95	ug/L	99
61) 2-Chlorotoluene	18.45	91	736550	49.95	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.28	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.43	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	49.92	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	772492	49.11	ug/L	98
66) sec-Butylbenzene	19.38	105	1121222	49.75	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	414698	49.34	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	411367	48.92	ug/L	99
69) p-Isopropyltoluene	19.61	119	866615	49.52	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	359735	50.59	ug/L	100
71) n-Butylbenzene	20.11	91	964633	49.82	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	50.62	ug/L	96
73) 1,2,4-Trichlorobenzene	22.28	180	240360	47.56	ug/L	100
74) Naphthalene	22.63	128	314469	48.88	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	53.99	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	192513	45.85	ug/L	100

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Page

79 of 262

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031411.M Thu Mar 17 14:02:06 2011

Quantitation Report

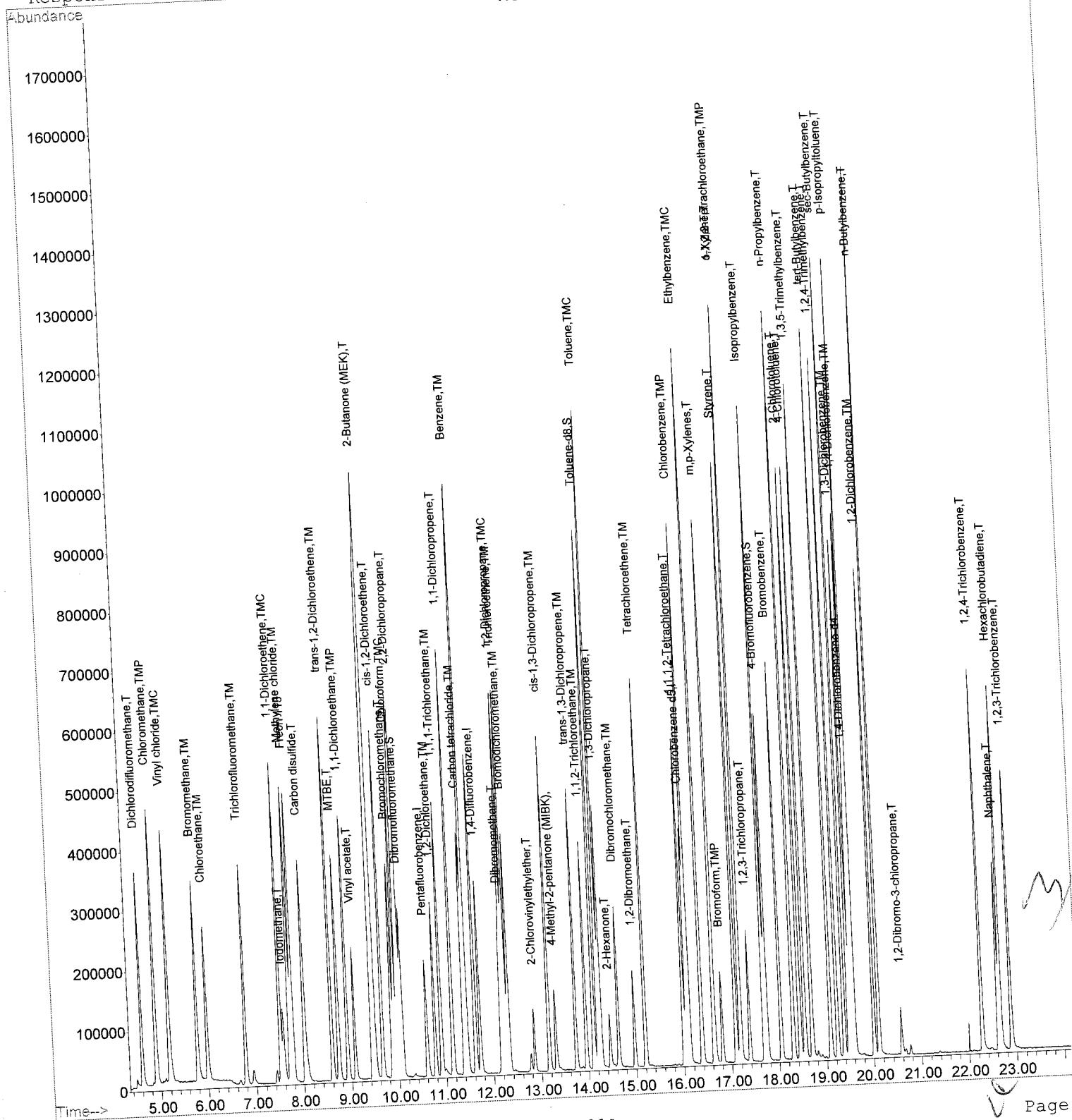
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D  
 Acq On : 17 Mar 2011 12:17 pm  
 Sample : 50 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:01 2011

Vial: 9  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171112.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	425047	101.93	ug/L	0.00
Spiked Amount	25.000			Recovery	= 407.72%	
39) Toluene-d8	14.12	98	1505447	102.12	ug/L	0.00
Spiked Amount	25.000			Recovery	= 408.48%	
53) 4-Bromofluorobenzene	17.75	95	536695	104.44	ug/L	0.00
Spiked Amount	25.000			Recovery	= 417.76%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	779223	92.13	ug/L	100
3) Chloromethane	4.90	50	1431368	119.80	ug/L	100
4) Vinyl chloride	5.18	62	1228117	105.30	ug/L	100
5) Bromomethane	5.78	64	641424	124.14	ug/L	98
6) Chloroethane	5.98	64	584071	93.50	ug/L	98
7) Trichlorofluoromethane	6.78	101	698452	79.96	ug/L	99
8) Acetone	6.94	43	84316	Below Cal		99
9) Iodomethane	7.58	142	393011	97.15	ug/L	97
10) 1,1-Dichloroethene	7.52	96	450680	101.96	ug/L	100
11) Methylene chloride	7.71	84	530536	90.93	ug/L	100
12) Freon 113	7.78	101	537890	94.84	ug/L	100
13) Carbon disulfide	8.04	76	1652598	105.75	ug/L	95
14) trans-1,2-Dichloroethene	8.60	96	514680	94.91	ug/L	100
15) MTBE	8.74	73	859812	93.80	ug/L	100
16) 1,1-Dichloroethane	8.93	63	1054794	94.66	ug/L	100
17) Vinyl acetate	9.08	43	827230	95.91	ug/L	95
18) 2-Butanone (MEK)	9.47	72	27904	94.38	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	527963	93.73	ug/L	99
20) Bromochloromethane	9.87	128	191014	91.51	ug/L	99
21) Chloroform	9.93	83	877382	95.25	ug/L	100
22) 2,2-Dichloropropane	10.04	77	739530	96.19	ug/L	100
24) 1,2-Dichloroethane	10.78	62	540824	99.03	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	659685	95.75	ug/L	99
27) 1,1-Dichloropropene	11.15	75	764611	96.61	ug/L	100
28) Carbon tetrachloride	11.39	117	547122	99.42	ug/L	100
29) Benzene	11.44	78	2051183	97.90	ug/L	98
30) Dibromomethane	12.17	93	236182	94.51	ug/L	99
31) 1,2-Dichloropropane	12.21	63	573859	97.85	ug/L	98
32) Trichloroethene	12.27	95	518186	98.14	ug/L	99
33) Bromodichloromethane	12.33	83	619726	100.21	ug/L	98
34) 2-Chlorovinylethylether	12.86	63	99299	69.01	ug/L	99
35) cis-1,3-Dichloropropene	13.17	75	755768	101.34	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	94.02	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	581943	99.90	ug/L	97
38) 1,1,2-Trichloroethane	13.95	83	272981	95.51	ug/L	100
40) Toluene	14.22	92	1181672	100.81	ug/L	100
42) 1,3-Dichloropropane	14.27	76	562918	97.92	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031411.M Thu Mar 17 14:02:38 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	102.53	ug/L	97
44) Dibromochloromethane	14.65	129	341882	103.49	ug/L	99
45) 1,2-Dibromoethane	14.98	107	294156	104.89	ug/L	100
46) Tetrachloroethene	15.20	166	455622	101.24	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	103.59	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.63	ug/L	99
49) Ethylbenzene	16.38	91	2245318	102.94	ug/L	99
50) m,p-Xylenes	16.64	106	773283	100.56	ug/L	100
51) Styrene	17.10	104	1244691	105.20	ug/L	100
52) o-Xylene	17.20	106	750628	100.99	ug/L	97
55) Bromoform	16.82	173	182147	107.85	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.48	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	75618	101.00	ug/L	100
58) Isopropylbenzene	17.70	105	1844526	98.70	ug/L	99
59) Bromobenzene	18.05	156	429425	101.80	ug/L	100
60) n-Propylbenzene	18.30	91	2615929	99.09	ug/L	99
61) 2-Chlorotoluene	18.45	91	1500663	98.74	ug/L	99
62) 4-Chlorotoluene	18.55	91	1492720	98.30	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	99.53	ug/L	99
64) tert-Butylbenzene	19.09	119	1344278	98.40	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	97.37	ug/L	100
66) sec-Butylbenzene	19.39	105	2280043	98.16	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	97.78	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	846913	97.72	ug/L	100
69) p-Isopropyltoluene	19.61	119	1785874	99.02	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	99.76	ug/L	99
71) n-Butylbenzene	20.12	91	1981760	99.31	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	99.91	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	510699	98.06	ug/L	100
74) Naphthalene	22.63	128	678287	102.29	ug/L	100
75) Hexachlorobutadiene	22.69	225	316227	110.66	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	412634	95.36	ug/L	99

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Page

(#) = qualifier out of range (m) = manual integration  
 03171113.D 031411.M Thu Mar 17 14:02:38 2011

Quantitation Report

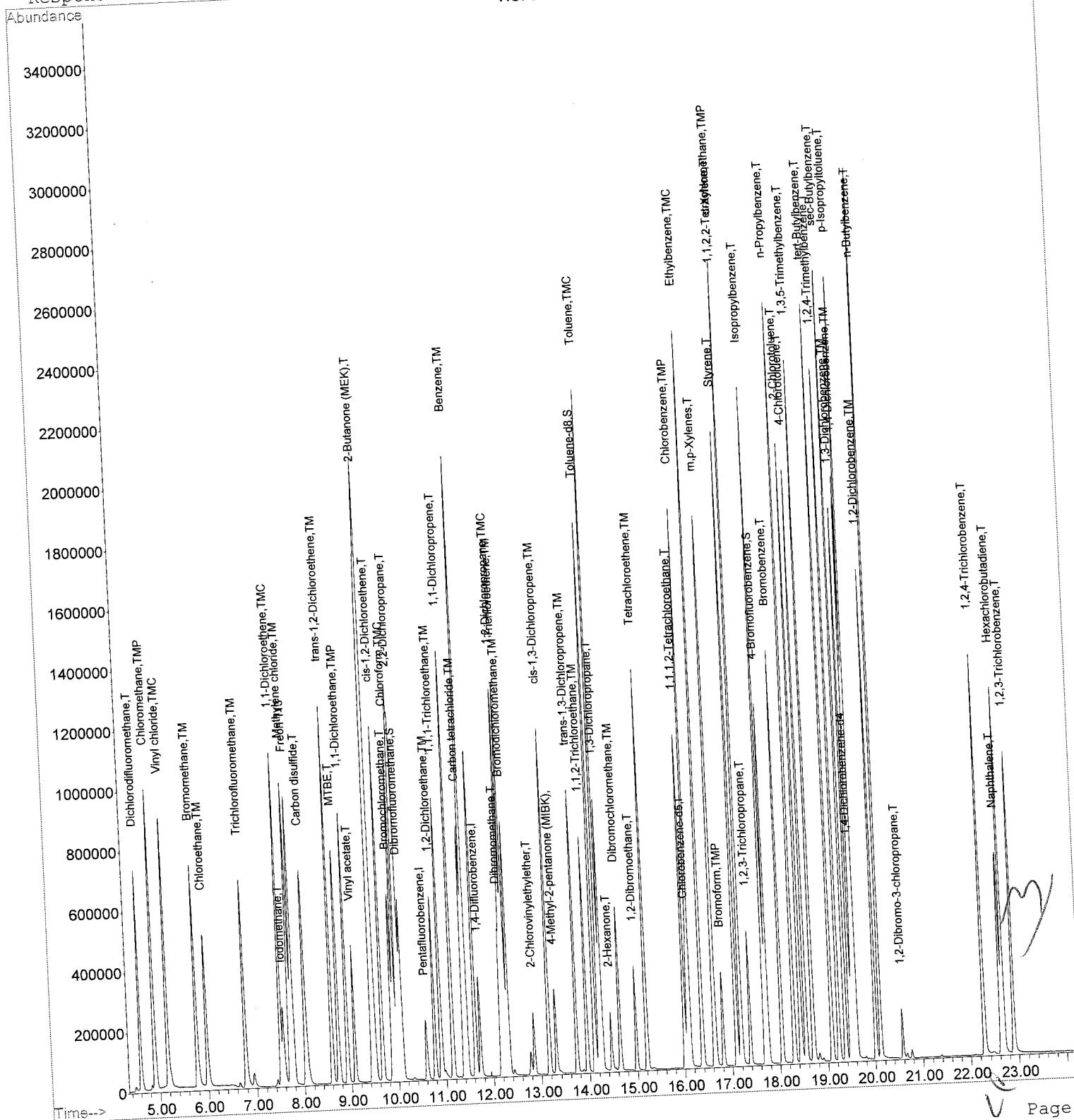
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D  
 Acq On : 17 Mar 2011 12:48 pm  
 Sample : 100 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:02 2011

Vial: 10  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031411.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration

TIC: 03171113.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	839626	197.42	ug/L	0.00
Spiked Amount	25.000			Recovery	= 789.68%	
39) Toluene-d8	14.12	98	3013932	203.78	ug/L	0.00
Spiked Amount	25.000			Recovery	= 815.12%	
53) 4-Bromofluorobenzene	17.76	95	1038923	199.04	ug/L	0.00
Spiked Amount	25.000			Recovery	= 796.16%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	1487523	172.44	ug/L	99
3) Chloromethane	4.90	50	2913054	239.06	ug/L	100
4) Vinyl chloride	5.16	62	2428967	204.20	ug/L	99
5) Bromomethane	5.78	94	1343422	254.94	ug/L	98
6) Chloroethane	5.98	64	1199344	188.24	ug/L	99
7) Trichlorofluoromethane	6.79	101	1701514	191.01	ug/L	100
8) Acetone	6.94	43	201529	Below Cal		99
9) Iodomethane	7.58	142	794173	192.50	ug/L	96
10) 1,1-Dichloroethene	7.52	96	920511	204.48	ug/L	98
11) Methylene chloride	7.71	84	1063508	178.73	ug/L	99
12) Freon 113	7.78	101	1079115	186.56	ug/L	100
13) Carbon disulfide	8.03	76	3312605	208.15	ug/L	96
14) trans-1,2-Dichloroethene	8.60	96	1036042	187.33	ug/L	100
15) MTBE	8.74	73	1719756	183.97	ug/L	99
16) 1,1-Dichloroethane	8.93	63	2105414	185.27	ug/L	100
17) Vinyl acetate	9.08	43	1660788	188.79	ug/L	87
18) 2-Butanone (MEK)	9.47	72	57153	189.53	ug/L	98
19) cis-1,2-Dichloroethene	9.66	96	1073476	186.86	ug/L	98
20) Bromochloromethane	9.88	128	361702	169.90	ug/L	99
21) Chloroform	9.93	83	1746080	185.86	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	184.71	ug/L	99
24) 1,2-Dichloroethane	10.78	62	1056987	189.77	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	1325051	188.58	ug/L	99
27) 1,1-Dichloropropene	11.15	75	1539559	193.90	ug/L	100
28) Carbon tetrachloride	11.39	117	1092097	197.81	ug/L	100
29) Benzene	11.45	78	4061777	193.23	ug/L	99
30) Dibromomethane	12.17	93	461244	183.97	ug/L	99
31) 1,2-Dichloropropane	12.21	63	1126863	191.52	ug/L	99
32) Trichloroethene	12.27	95	1022222	192.97	ug/L	100
33) Bromodichloromethane	12.33	83	1217593	196.24	ug/L	98
34) 2-Chlorovinylethylether	12.86	63	174106	120.61	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	199.81	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	183.63	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.49	ug/L	98
38) 1,1,2-Trichloroethane	13.95	83	536251	187.01	ug/L	100
40) Toluene	14.22	92	2368495	201.40	ug/L	100
42) 1,3-Dichloropropane	14.28	76	1107954	189.75	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031411.M Thu Mar 17 14:03:08 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031411.RES  
 Quant Time: Mar 17 14:02 2011

Quant Method : C:\HPCHEM\1...\031411.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Mon Mar 14 17:35:22 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	196.91	ug/L	# 97
44) Dibromochloromethane	14.65	129	686033	204.44	ug/L	100
45) 1,2-Dibromoethane	14.99	107	575405	202.00	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.99	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	207.25	ug/L	99
48) Chlorobenzene	16.13	112	2393108	199.20	ug/L	97
49) Ethylbenzene	16.38	91	4465000	201.54	ug/L	98
50) m,p-Xylenes	16.64	106	1550944	198.56	ug/L	99
51) Styrene	17.10	104	2561762	213.16	ug/L	99
52) o-Xylene	17.20	106	1517247	200.97	ug/L	100
55) Bromoform	16.82	173	364089	189.30	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.64	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	155202	182.01	ug/L	98
58) Isopropylbenzene	17.70	105	3655213	171.73	ug/L	99
59) Bromobenzene	18.05	156	865850	180.23	ug/L	97
60) n-Propylbenzene	18.31	91	5305462	176.46	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	180.76	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.25	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	192.28	ug/L	99
64) tert-Butylbenzene	19.09	119	2997423	192.66	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	186.05	ug/L	97
66) sec-Butylbenzene	19.39	105	5038432	190.46	ug/L	100
67) 1,3-Dichlorobenzene	19.49	146	1885851	191.15	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.79	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	195.79	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	1645465	197.15	ug/L	98
71) n-Butylbenzene	20.12	91	4374192	192.47	ug/L	97
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	195.71	ug/L	98
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	186.75	ug/L	100
74) Naphthalene	22.63	128	1413680	187.19	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	212.10	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	830638	168.55	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031411.M Thu Mar 17 14:03:09 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D  
Acq On : 17 Mar 2011 1:19 pm  
Sample : 200 PPB  
Misc : 10.5

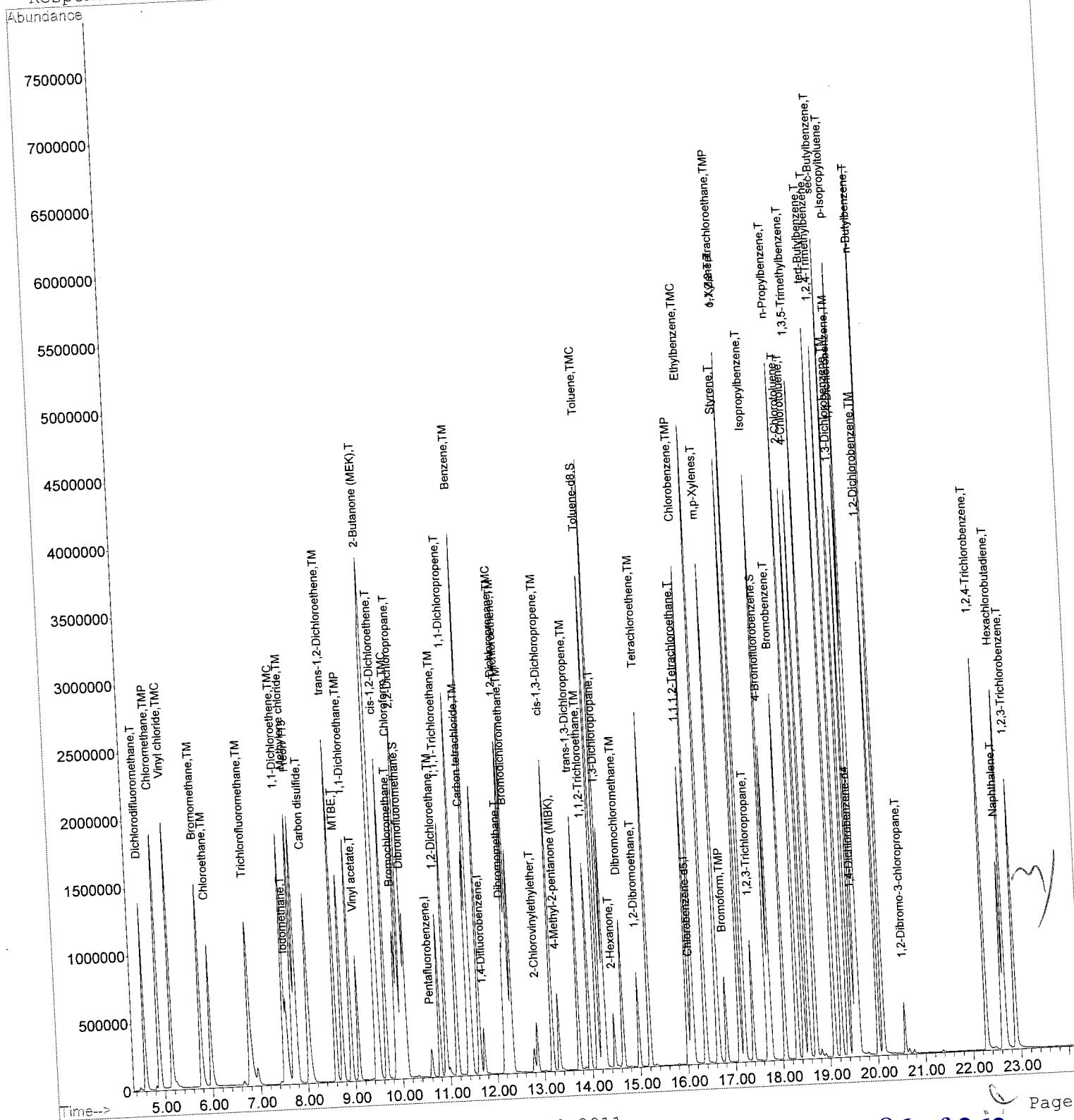
Vial: 12  
Operator: LC  
Inst : GCMS7  
Multiplr: 1.00

Misc :  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 17 14:02 2011

Quant Results File: 031411.RES

Method : C:\HPCHEM\1\GCMS7\METHOD  
Title : USEPA Method 8260B  
Last Update : Mon Mar 14 17:35:22 2011  
Response via : Initial Calibration

TIC: 03171114.D



## NEW8260-CCV

Data File Name 03171115.D  
 Data File Path C:\HPCHEM\1\GCMS7\DATA\031711\  
 Operator LC  
 Date Acquired 3/17/2011 1:50  
 Acq. Method File 8260B  
 Sample Name SS  
 Instrument Name GCMS7

Internal Standard	Target Response	CCV Response	Low	High	T/F	
Pentafluorobenzene	204788	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	354603	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	296499	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	131216	112264	56132	224528	TRUE	
Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	21.34	25.00	85.36	60	150	TRUE
Chloromethane	20.19	25.00	80.77	60	140	TRUE
Vinyl chloride	21.98	25.00	87.90	80	120	TRUE CCC
Bromomethane	21.20	25.00	87.64	70	130	TRUE
Chloroethane	21.91	25.00	101.76	70	150	TRUE
Trichlorofluoromethane	25.44	25.00	130.32	10	150	TRUE
Acetone	32.58	25.00	123.66	70	140	TRUE
Iodomethane	30.91	25.00	99.91	80	120	TRUE CCC
1,1-Dichloroethene	24.98	25.00	96.37	70	120	TRUE
Methylene chloride	24.09	25.00	95.98	60	140	TRUE
Freon 113	24.00	25.00	100.31	70	130	TRUE
Carbon disulfide	25.08	25.00	86.79	80	120	TRUE
trans-1,2-Dichloroethene	21.70	25.00	82.90	70	130	TRUE
MTBE	20.73	25.00	83.16	70	125	TRUE
1,1-Dichloroethane	20.79	25.00	107.60	40	150	TRUE
Vinyl acetate	26.90	25.00	99.67	40	150	TRUE
2-Butanone (MEK)	24.92	25.00	80.78	80	120	TRUE
cis-1,2-Dichloroethene	20.20	25.00	84.35	80	120	TRUE
Bromochloromethane	21.09	25.00	81.28	80	120	TRUE CCC
Chloroform	20.32	25.00	84.60	80	130	TRUE
2,2-Dichloropropane	21.15	25.00	86.27	80	120	TRUE
<b>Dibromofluoromethane</b>	<b>21.57</b>	<b>25.00</b>	<b>86.27</b>	<b>80</b>	<b>120</b>	<b>TRUE</b>
1,2-Dichloroethane	20.57	25.00	82.26	75	130	TRUE
1,1,1-Trichloroethane	21.81	25.00	87.23	80	120	TRUE
1,1-Dichloropropene	22.05	25.00	88.19	80	120	TRUE
Carbon tetrachloride	22.49	25.00	89.96	80	130	TRUE
Benzene	21.24	25.00	84.94	80	120	TRUE
Dibromomethane	22.05	25.00	88.19	80	120	TRUE CCC
1,2-Dichloropropane	21.44	25.00	85.74	80	120	TRUE
Trichloroethene	21.49	25.00	85.98	80	120	TRUE
Bromodichloromethane	21.49	25.00	132.10	70	135	TRUE
2-Chlorovinylethylether	33.03	25.00	86.67	80	120	TRUE
cis-1,3-Dichloropropene	21.67	25.00	94.48	60	130	TRUE
4-Methyl-2-pentanone (MIB)	23.62	25.00	90.94	80	125	TRUE
trans-1,3-Dichloropropene	22.74	25.00				

1,1,2-Trichloroethane	22.20	25.00	88.81	80	120	TRUE
<b>Toluene-d8</b>	<b>21.91</b>	<b>25.00</b>	<b>87.66</b>	<b>80</b>	<b>120</b>	TRUE CCC
Toluene	21.78	25.00	87.14	80	120	TRUE
1,3-Dichloropropane	21.05	25.00	84.20	80	120	TRUE
2-Hexanone	25.08	25.00	100.33	20	150	TRUE
Dibromochloromethane	21.71	25.00	86.84	80	120	TRUE
1,2-Dibromoethane	22.31	25.00	89.25	80	120	TRUE
Tetrachloroethene	22.09	25.00	88.37	70	130	TRUE
1,1,1,2-Tetrachloroethane	21.46	25.00	85.82	80	120	TRUE
Chlorobenzene	21.76	25.00	87.05	80	120	TRUE CCC
Ethylbenzene	21.51	25.00	86.06	80	120	TRUE
m,p-Xylenes	21.31	25.00	85.25	60	140	TRUE
Styrene	23.00	25.00	92.00	80	120	TRUE
o-Xylene	20.70	25.00	82.81	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>20.94</b>	<b>25.00</b>	<b>83.76</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	24.45	25.00	97.79	80	120	TRUE
1,1,2,2-Tetrachloroethane	23.28	25.00	93.12	80	120	TRUE
1,2,3-Trichloropropane	23.38	25.00	93.50	70	130	TRUE
Isopropylbenzene	25.73	25.00	102.90	80	130	TRUE
Bromobenzene	24.00	25.00	96.00	80	120	TRUE
n-Propylbenzene	24.01	25.00	96.04	75	130	TRUE
2-Chlorotoluene	22.31	25.00	89.23	80	120	TRUE
4-Chlorotoluene	23.19	25.00	92.75	80	120	TRUE
1,3,5-Trimethylbenzene	23.39	25.00	93.56	80	130	TRUE
tert-Butylbenzene	23.30	25.00	93.19	80	120	TRUE
1,2,4-Trimethylbenzene	23.52	25.00	94.06	80	120	TRUE
sec-Butylbenzene	22.94	25.00	91.76	80	125	TRUE
1,3-Dichlorobenzene	22.83	25.00	91.30	80	120	TRUE
1,4-Dichlorobenzene	22.81	25.00	91.26	80	120	TRUE
p-Isopropyltoluene	23.58	25.00	94.31	80	130	TRUE
1,2-Dichlorobenzene	22.83	25.00	91.31	80	120	TRUE
n-Butylbenzene	23.80	25.00	95.22	80	130	TRUE
1,2-Dibromo-3-chloropropane	24.52	25.00	98.10	50	150	TRUE
1,2,4-Trichlorobenzene	25.88	25.00	103.53	50	150	TRUE
Naphthalene	30.38	25.00	121.52	40	150	TRUE
Hexachlorobutadiene	24.16	25.00	96.62	40	150	TRUE
1,2,3-Trichlorobenzene	25.60	25.00	102.42	60	140	TRUE

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	204788	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	354603	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	296499	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131216	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.10	113	111142	21.57	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.28%		
39) Toluene-d8	14.12	98	391936	21.91	ug/L	0.00
Spiked Amount 25.000			Recovery =	87.64%		
53) 4-Bromofluorobenzene	17.75	95	136070	20.94	ug/L	0.00
Spiked Amount 25.000			Recovery =	83.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.61	85	206452	21.34	ug/L	99
3) Chloromethane	4.90	50	322987	20.19	ug/L	98
4) Vinyl chloride	5.19	62	312968	21.98	ug/L	100
5) Bromomethane	5.78	94	156914	21.20	ug/L	98
6) Chloroethane	5.99	64	165417	21.91	ug/L	99
7) Trichlorofluoromethane	6.79	101	251907	25.44	ug/L	99
8) Acetone	6.94	43	38773	32.58	ug/L	98
9) Iodomethane	7.58	142	141683	30.91	ug/L	98
10) 1,1-Dichloroethene	7.52	96	144273	24.98	ug/L	98
11) Methylene chloride	7.72	84	163712	24.09	ug/L	99
12) Freon 113	7.78	101	164091	24.00	ug/L	99
13) Carbon disulfide	8.04	76	515335	25.08	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	138660	21.70	ug/L	94
15) MTBE	8.75	73	226347	20.73	ug/L	99
16) 1,1-Dichloroethane	8.92	63	277166	20.79	ug/L	99
17) Vinyl acetate	9.08	43	278544	26.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	7971	24.92	ug/L	55
19) cis-1,2-Dichloroethene	9.67	96	133655	20.20	ug/L	99
20) Bromochloromethane	9.88	128	51073	21.09	ug/L	97
21) Chloroform	9.94	83	223530	20.32	ug/L	99
22) 2,2-Dichloropropane	10.04	77	188645	21.15	ug/L	97
23) 1,2-Dichloropropane	10.78	62	138066	20.57	ug/L	100
24) 1,2-Dichloroethane	10.92	97	172274	21.81	ug/L	97
25) 1,1,1-Trichloroethane	11.15	75	200126	22.05	ug/L	99
27) 1,1-Dichloropropene	11.39	117	140957	22.49	ug/L	99
28) Carbon tetrachloride	11.44	78	515367	21.24	ug/L	100
29) Benzene	12.18	93	63306	22.05	ug/L	98
30) Dibromomethane	12.22	63	145297	21.44	ug/L	100
31) 1,2-Dichloropropene	12.27	95	130435	21.49	ug/L	100
32) Trichloroethene	12.34	83	153079	21.49	ug/L	99
33) Bromodichloromethane	12.86	63	40803	33.03	ug/L	98
34) 2-Chlorovinylethylether	13.17	75	187370	21.67	ug/L	100
35) cis-1,3-Dichloropropene	13.31	43	83668	23.62	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.74	75	151736	22.74	ug/L	100
37) trans-1,3-Dichloropropene	13.96	83	71241	22.20	ug/L	98
38) 1,1,2-Trichloroethane	14.22	92	300558	21.78	ug/L	97
40) Toluene	14.27	76	141234	21.05	ug/L	96
42) 1,3-Dichloropropane						

(#) = qualifier out of range (m) = manual integration  
 03171115.D 031711.M Thu Mar 17 14:48:24 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 17 14:48 2011 Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	56108	25.08	ug/L	# 94
44) Dibromochloromethane	14.65	129	87587	21.71	ug/L	95
45) 1,2-Dibromoethane	14.99	107	75157	22.31	ug/L	99
46) Tetrachloroethene	15.21	166	117481	22.09	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	94210	21.46	ug/L	97
48) Chlorobenzene	16.12	112	303242	21.76	ug/L	99
49) Ethylbenzene	16.38	91	564816	21.51	ug/L	100
50) m,p-Xylenes	16.65	106	195974	21.31	ug/L	98
51) Styrene	17.10	104	320734	23.00	ug/L	98
52) o-Xylene	17.19	106	185035	20.70	ug/L	99
55) Bromoform	16.81	173	46447	24.45	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.19	83	89438	23.28	ug/L	100
57) 1,2,3-Trichloropropane	17.39	110	19539	23.38	ug/L	94
58) Isopropylbenzene	17.70	105	516912	25.73	ug/L	100
59) Bromobenzene	18.06	156	111249	24.00	ug/L	99
60) n-Propylbenzene	18.31	91	688724	24.01	ug/L	100
61) 2-Chlorotoluene	18.45	91	374880	22.31	ug/L	100
62) 4-Chlorotoluene	18.55	91	386272	23.19	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	406096	23.39	ug/L	100
64) tert-Butylbenzene	19.10	119	344368	23.30	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	410391	23.52	ug/L	99
66) sec-Butylbenzene	19.38	105	581187	22.94	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	215599	22.83	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	216972	22.81	ug/L	99
69) p-Isopropyltoluene	19.61	119	456572	23.58	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	187538	22.83	ug/L	99
71) n-Butylbenzene	20.12	91	513084	23.80	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	12556	24.52	ug/L	96
73) 1,2,4-Trichlorobenzene	22.29	180	137336	25.88	ug/L	99
74) Naphthalene	22.63	128	213772	30.38	ug/L	100
75) Hexachlorobutadiene	22.69	225	81857	24.16	ug/L	98
76) 1,2,3-Trichlorobenzene	22.90	180	110762	25.60	ug/L	99

90 of 262 ge 2

Quantitation Report

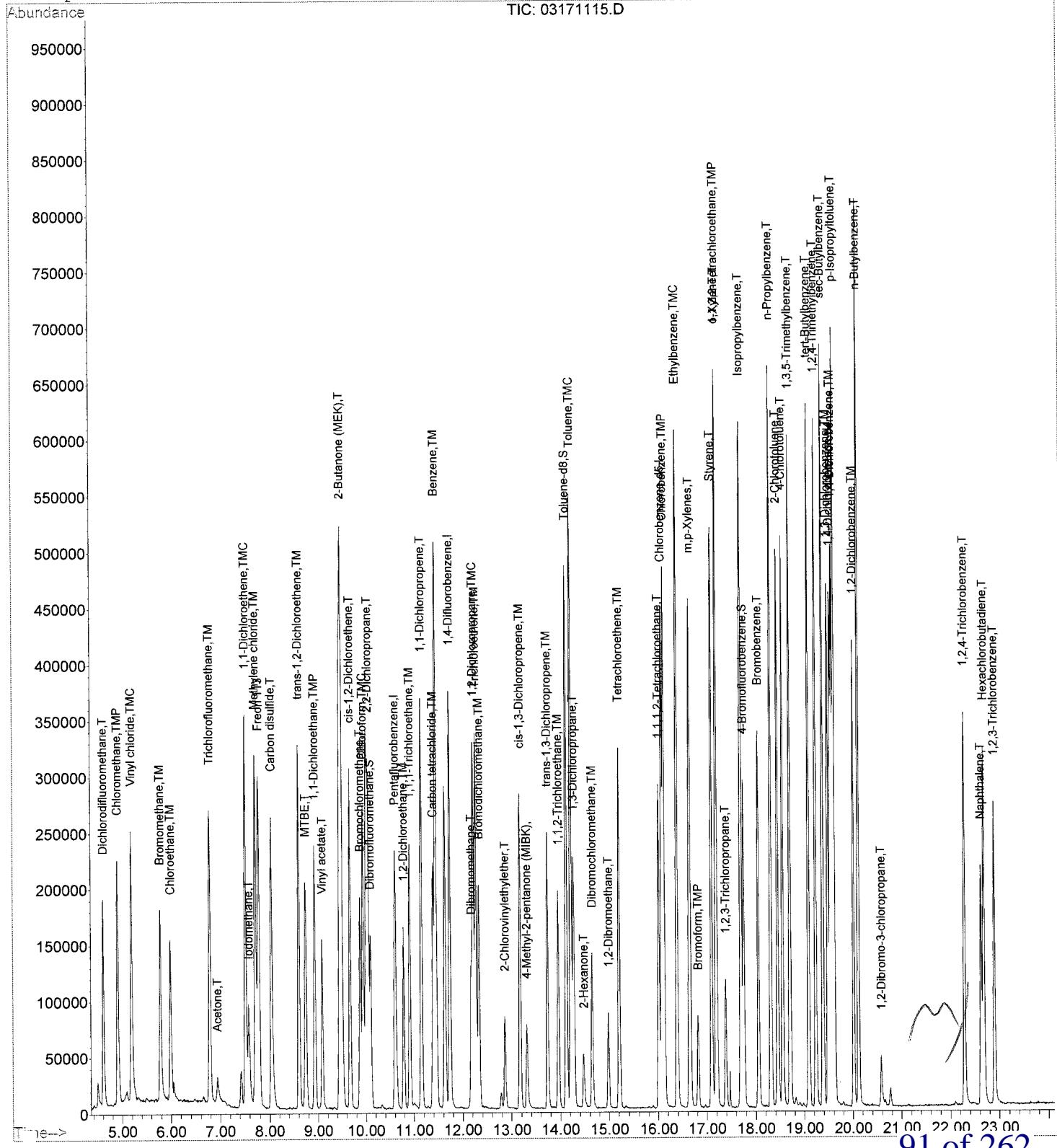
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171115.D Vial: 13  
 Acq On : 17 Mar 2011 1:50 pm Operator: LC  
 Sample : SS Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P

Quant Time: Mar 17 14:48 2011

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



# 8260AZ - Vapor Analysis 1 PPMV Tertiary Standard

3/17/2011

\* Compound not in the standard mix

ppmv	Mol Wt.	ug/L
1	260.76	10.80

**Conversion Calculation:**  $\text{ug/L} = \text{ppmv} \cdot (\text{MW} \cdot \text{P}) / (\text{R} \cdot \text{T})$

R=Gas Constant(0.08206 l\*atm/(mol\*K)) MW=Molecular Weight  
 T=Temp in Degree K (21+273.15) P=Pressure in atm  
 Assume Temp in C of 21 (70 degrees F)

<u>Compound</u>	<u>Molecular Weight</u>	<u>Expected Value (ug/L)</u>	<u>Actual Value (ug/L)</u>	<u>% Recovery</u>
Dichlorodifluoromethane	120.91	5.01	6.05	121
Chloromethane	50.49	2.09	2.13	102
Vinyl Chloride	62.5	2.59	2.49	96
Bromomethane	94.94	3.93	1.91	49
Chloroethane	64.52	2.67	2.56	96
Trichlorofluoromethane	137.37	5.69	5.99	105
Acetone *				
Iodomethane *				
1,1-Dichloroethene	96.94	4.02	3.55	88
Methylene Chloride	84.93	3.52	3.35	95
Carbon Disulfide *				
trans-1,2-DCE *				
MTBE *				
1,1-Dichloroethane	98.96	4.10	3.37	82
Vinyl Acetate *				
2-Butanone *	96.94	4.02	3.41	85
cis-1,2-DCE	96.94	4.02	3.41	85
Bromochloromethane *	119.38	4.95	3.92	79
Chloroform				
2,2-Dichloropropane *				
1,2-DCA	98.96	4.10	3.33	81
1,1,1-Trichloroethane	133.41	5.53	4.69	85
1,1-Dichloropropene *				
Carbon Tetrachloride	153.82	6.37	5.34	84
Benzene	78.11	3.24	2.68	83
Dibromomethane *				
1,2-Dichloropropane	112.99	4.68	3.9	83
Trichloroethene	131.39	5.44	4.59	84
Bromodichloromethane *				
2-CEVE *				
cis-1,3-Dichloropropene	110.97	4.60	3.55	77
4-Methyl-2-Pentanone *				
trans-1,3-Dichloropropene	110.97	4.60	3.53	77
1,1,2-Trichloroethane	133.41	5.53	4.56	82
Toluene	92.14	3.82	3.16	83
1,3-Dichloropropane *				

2-Hexanone *				
Dibromochloromethane *				
<b>1,2-Dibromoethane</b>	<b>187.86</b>	<b>7.78</b>	<b>6.53</b>	<b>84</b>
<b>Tetrachloroethene</b>	<b>165.83</b>	<b>6.87</b>	<b>5.59</b>	<b>81</b>
1,1,1,2-Tetrachloroethane *				
<b>Chlorobenzene</b>	<b>112.56</b>	<b>4.66</b>	<b>3.59</b>	<b>77</b>
<b>Ethylbenzene</b>	<b>106.16</b>	<b>4.40</b>	<b>3.45</b>	<b>78</b>
<b>m,p-Xylenes</b>	<b>212.36</b>	<b>8.80</b>	<b>6.85</b>	<b>78</b>
<b>Styrene</b>	<b>104.16</b>	<b>4.31</b>	<b>3.37</b>	<b>78</b>
<b>o-Xylene</b>	<b>106.18</b>	<b>4.40</b>	<b>3.51</b>	<b>80</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>133.41</b>	<b>5.53</b>	<b>5.91</b>	<b>107</b>
1,2,3-Trichloropropane *				
Isopropylbenzene *				
Bromobenzene *				
n-Propylbenzene *				
2-Chlorotoluene *				
4-Chlorotoluene *				
<b>1,3,5-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.09</b>	<b>82</b>
tert-butylbenzene *				
<b>1,2,4-Trimethylbenzene</b>	<b>120.19</b>	<b>4.98</b>	<b>4.11</b>	<b>83</b>
sec-butylbenzene *				
<b>1,3-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.85</b>	<b>80</b>
<b>1,4-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>4.73</b>	<b>78</b>
p-Isopropyltoluene *				
<b>1,2-Dichlorobenzene</b>	<b>147</b>	<b>6.09</b>	<b>5.01</b>	<b>82</b>
n-Butylbenzene *				
1,2-Dibromo-3-chloropropane *				
<b>1,2,4-Trichlorobenzene</b>	<b>181.46</b>	<b>7.52</b>	<b>5.44</b>	<b>72</b>
Naphthalene *				
<b>Hexachlorobutadiene</b>	<b>260.76</b>	<b>10.80</b>	<b>8.7</b>	<b>81</b>
1,2,3-Trichlorobenzene *				

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon.	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	201057	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.74	114	351105	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	292717	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	134120	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.10	113	108706	21.49	ug/L	0.00
Spiked Amount 25.000			Recovery	=	85.96%	
39) Toluene-d8	14.12	98	384321	21.70	ug/L	0.00
Spiked Amount 25.000			Recovery	=	86.80%	
53) 4-Bromofluorobenzene	17.76	95	132578	20.67	ug/L	0.00
Spiked Amount 25.000			Recovery	=	82.68%	
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	57530	6.06	ug/L	95
3) Chloromethane	4.90	50	33468	2.13	ug/L	98
4) Vinyl chloride	5.19	62	34821	2.49	ug/L	96
5) Bromomethane	5.78	94	12125	1.91	ug/L	94
6) Chloroethane	5.99	64	18973	2.56	ug/L	90
7) Trichlorofluoromethane	6.79	101	58222	5.99	ug/L	100
8) Acetone	6.94	43	1602	Below Cal	#	85
9) Iodomethane	7.57	142	6053	1.47	ug/L	91
10) 1,1-Dichloroethene	7.52	96	20124	3.55	ug/L	97
11) Methylene chloride	7.72	84	22344	3.35	ug/L	90
12) Freon 113	7.78	101	41757	6.22	ug/L	97
13) Carbon disulfide	8.03	76	10613	0.53	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	558	0.09	ug/L	60
15) MTBE	8.75	73	153	0.01	ug/L	50
16) 1,1-Dichloroethane	8.93	63	44110	3.37	ug/L	99
17) Vinyl acetate	9.09	43	405	0.04	ug/L	83
18) 2-Butanone (MEK)	9.66	72	117	1.25	ug/L	1
19) cis-1,2-Dichloroethene	9.67	96	22148	3.41	ug/L	96
20) Bromochloromethane	0.00	128	0	N.D.		
21) Chloroform	9.94	83	42350	3.92	ug/L	98
22) 2,2-Dichloropropane	0.00	77	0	N.D.		
24) 1,2-Dichloroethane	10.78	62	21923	3.33	ug/L	96
25) 1,1,1-Trichloroethane	10.92	97	36411	4.69	ug/L	98
27) 1,1-Dichloropropene	0.00	75	0	N.D.		
28) Carbon tetrachloride	11.40	117	33155	5.34	ug/L	97
29) Benzene	11.45	78	64449	2.68	ug/L	98
30) Dibromomethane	0.00	93	0	N.D.		
31) 1,2-Dichloropropane	12.22	63	26155	3.90	ug/L	99
32) Trichloroethene	12.28	95	27561	4.59	ug/L	97
33) Bromodichloromethane	12.29	83	154	0.02	ug/L	25
34) 2-Chlorovinylethylether	0.00	63	0	N.D.		
35) cis-1,3-Dichloropropene	13.17	75	30363	3.55	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.33	43	274	0.08	ug/L	50
37) trans-1,3-Dichloropropene	13.74	75	23347	3.53	ug/L	98
38) 1,1,2-Trichloroethane	13.96	83	14497	4.56	ug/L	99
40) Toluene	14.22	92	43103	3.16	ug/L	96
42) 1,3-Dichloropropane	14.21	76	285	0.04	ug/L	44

(#) = qualifier out of range (m) = manual integration  
 03171116.D 031711.M Thu Mar 17 14:49:25 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
 Acq On : 17 Mar 2011 2:20 pm Operator: LC  
 Sample : TERTIARY GAS Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 17 14:48 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

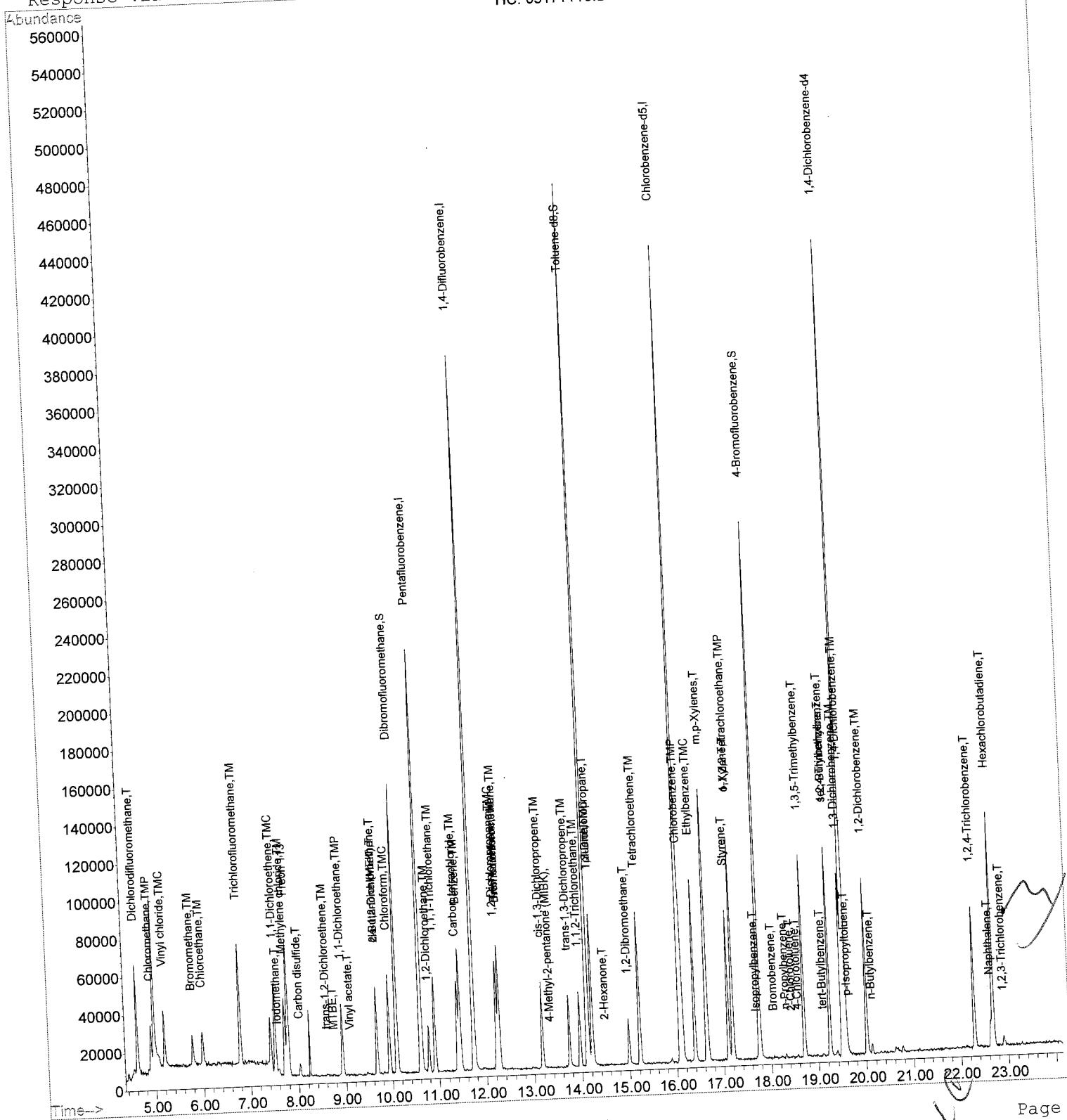
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	136	0.06	ug/L #	29
44) Dibromochloromethane	0.00	129	0	N.D.		
45) 1,2-Dibromoethane	14.99	107	21706	6.53	ug/L	99
46) Tetrachloroethene	15.21	166	29329	5.59	ug/L	99
47) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
48) Chlorobenzene	16.12	112	49412	3.59	ug/L	98
49) Ethylbenzene	16.38	91	89509	3.45	ug/L	99
50) m,p-Xylenes	16.64	106	62191	6.85	ug/L	100
51) Styrene	17.10	104	46398	3.37	ug/L	97
52) o-Xylene	17.19	106	30948	3.51	ug/L	97
55) Bromoform	0.00	173	0	N.D.		
56) 1,1,2,2-Tetrachloroethane	17.19	83	23190	5.91	ug/L	95
57) 1,2,3-Trichloropropane	0.00	110	0	N.D.		
58) Isopropylbenzene	17.70	105	1070	0.05	ug/L #	51
59) Bromobenzene	18.06	156	141	0.03	ug/L #	43
60) n-Propylbenzene	18.32	91	1826	0.06	ug/L #	90
61) 2-Chlorotoluene	18.45	91	787	0.05	ug/L #	44
62) 4-Chlorotoluene	18.56	91	1213	0.07	ug/L #	65
63) 1,3,5-Trimethylbenzene	18.71	105	72087	4.06	ug/L	98
64) tert-Butylbenzene	19.09	119	908	0.06	ug/L #	76
65) 1,2,4-Trimethylbenzene	19.24	105	73403	4.11	ug/L	99
66) sec-Butylbenzene	19.24	105	73403	2.83	ug/L #	61
67) 1,3-Dichlorobenzene	19.49	146	46821	4.85	ug/L	100
68) 1,4-Dichlorobenzene	19.58	146	46004	4.73	ug/L	97
69) p-Isopropyltoluene	19.62	119	1222	0.06	ug/L #	89
70) 1,2-Dichlorobenzene	20.02	146	42108	5.01	ug/L	98
71) n-Butylbenzene	20.13	91	3423	0.16	ug/L	97
72) 1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.		
73) 1,2,4-Trichlorobenzene	22.29	180	29509	5.44	ug/L	99
74) Naphthalene	22.63	128	15881	2.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	30129	8.70	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	2346	0.53	ug/L	95

(#) = qualifier out of range (m) = manual integration  
 03171116.D 031711.M Thu Mar 17 14:49:25 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171116.D Vial: 16  
Acq On : 17 Mar 2011 2:20 pm Operator: LC  
Sample : TERTIARY GAS Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 17 14:48 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTF INC0317)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:36 2011 Quant Results File: 031711.RES

Re-LC

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	193696	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	342205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	281588	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131620	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.08	113	110687	22.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.84%		
39) Toluene-d8	14.11	98	374753	21.71	ug/L	0.00
Spiked Amount 25.000			Recovery =	86.84%		
53) 4-Bromofluorobenzene	17.75	95	131653	21.33	ug/L	0.00
Spiked Amount 25.000			Recovery =	85.32%		
Target Compounds				Qvalue		
3) Chloromethane	4.89	50	1791	0.12	ug/L	1PL 98
5) Bromomethane	5.77	94	123	0.28	ug/L	# 76
8) Acetone	6.93	43	3328	Below Cal	#	67
13) Carbon disulfide	8.02	76	5282	0.27	ug/L	100
17) Vinyl acetate	9.19	43	944	0.10	ug/L	# 83
24) 1,2-Dichloroethane	10.60	62	1206	0.19	ug/L	# 1
38) 1,1,2-Trichloroethane	14.11	83	345	0.11	ug/L	# 1
42) 1,3-Dichloropropane	14.12	76	3863	0.61	ug/L	# 1PL 68
43) 2-Hexanone	14.46	43	235	0.11	ug/L	# 1PL 29
74) Naphthalene	22.63	128	1667	0.24	ug/L	100

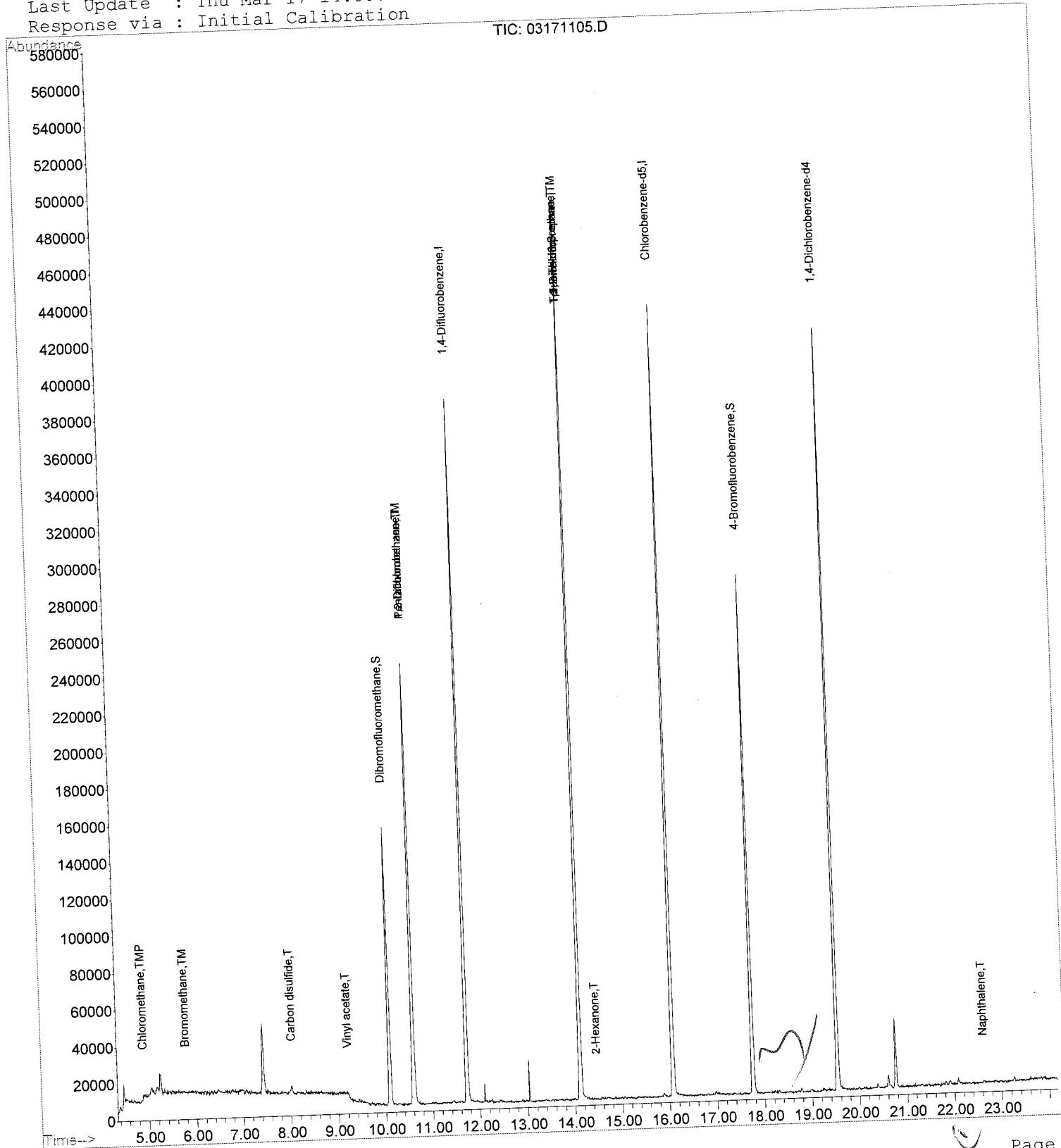
(#) = qualifier out of range (m) = manual integration  
 03171105.D 031711.M Fri Mar 18 08:36:53 2011

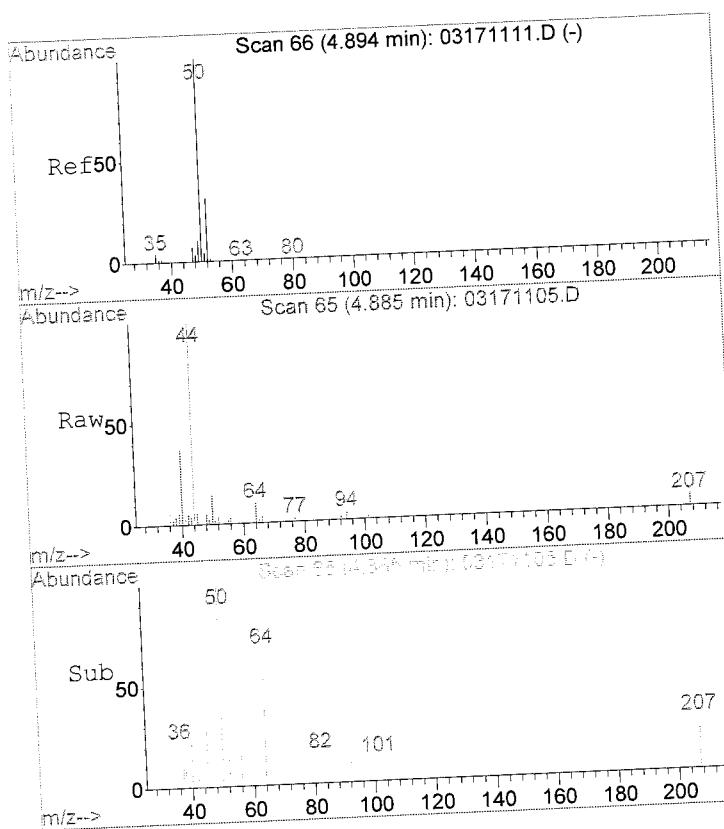
## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171105.D Vial: 2  
 Acq On : 17 Mar 2011 8:41 am Operator: LC  
 Sample : BLANK Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:36 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

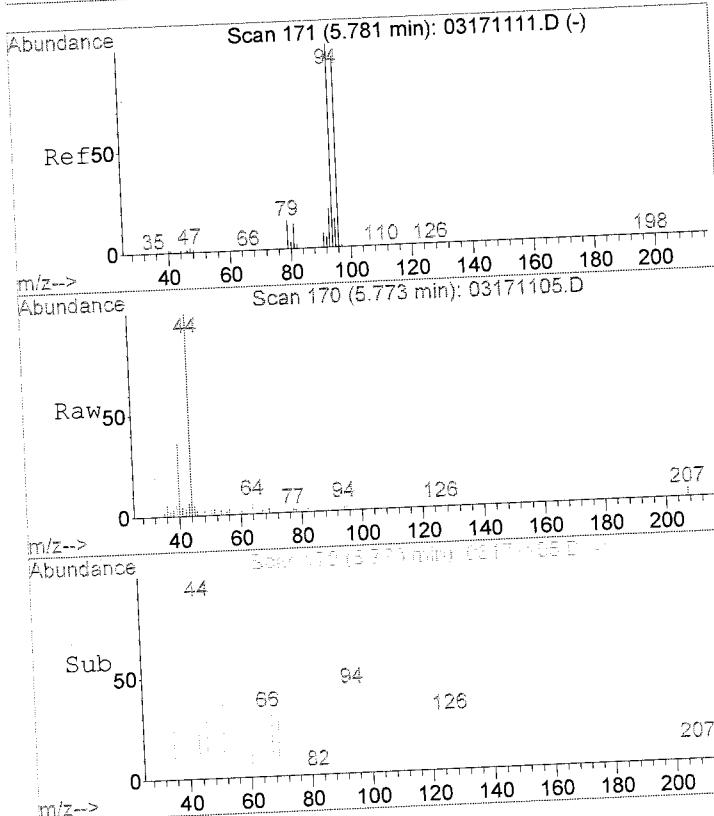
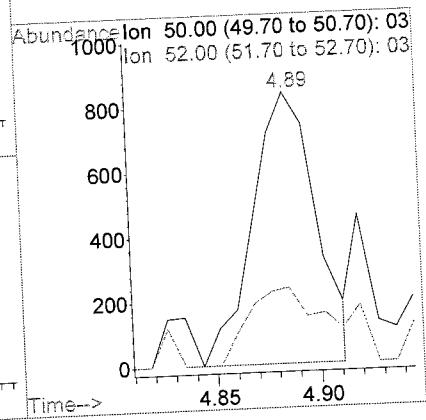
TIC: 03171105.D





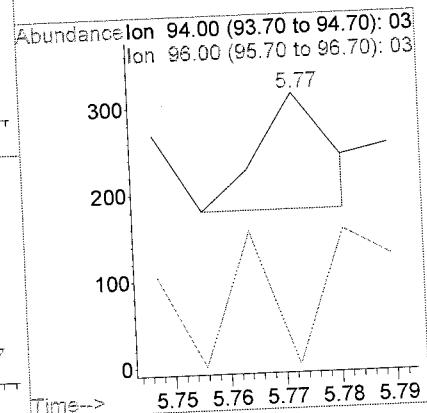
#3  
Chloromethane  
Concen: 0.12 ug/L  
RT: 4.89 min Scan# 65  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

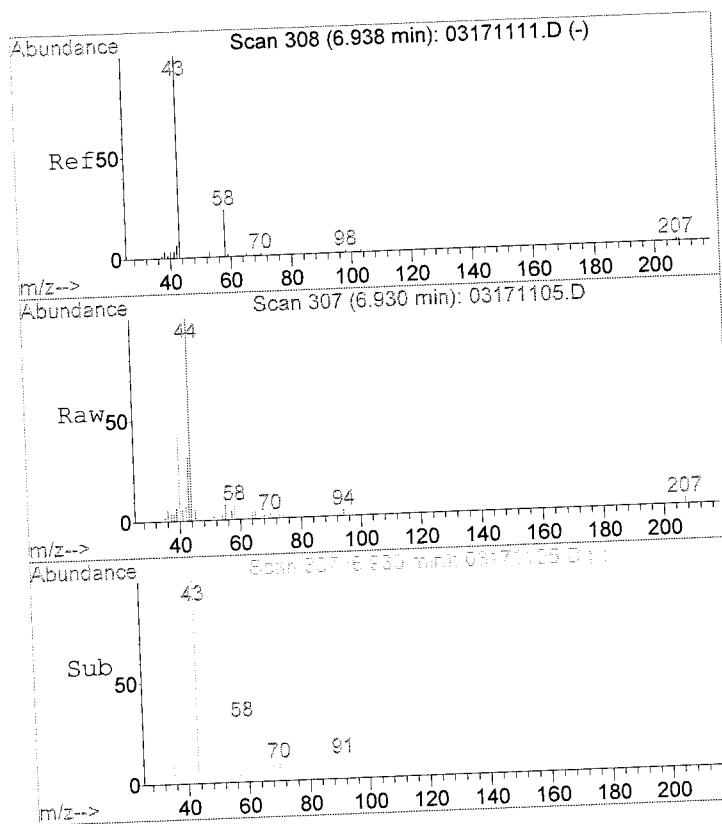
Tgt Ion: 50 Resp: 1791  
Ion Ratio Lower Upper  
50 100  
52 32.7 25.1 37.7



#5  
Bromomethane  
Concen: 0.28 ug/L  
RT: 5.77 min Scan# 170  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

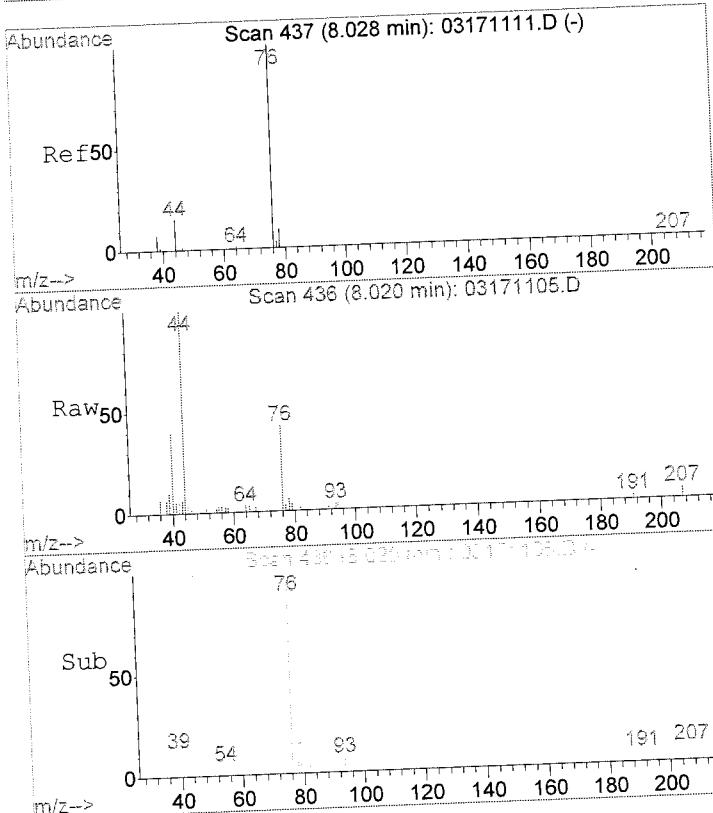
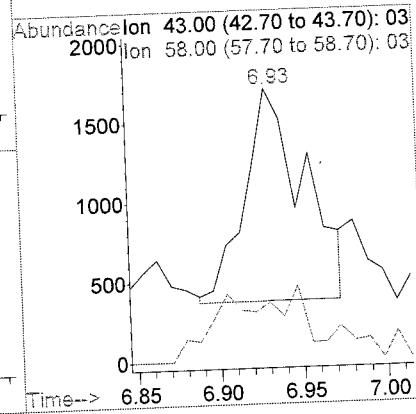
Tgt Ion: 94 Resp: 123  
Ion Ratio Lower Upper  
94 100  
96 115.4 74.0 111.0#





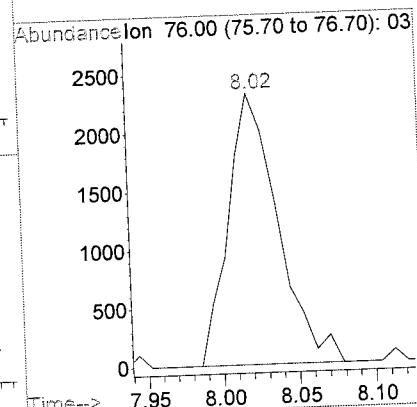
#8  
 Acetone  
 Concen: Below Cal  
 RT: 6.93 min Scan# 307  
 Delta R.T. -0.01 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

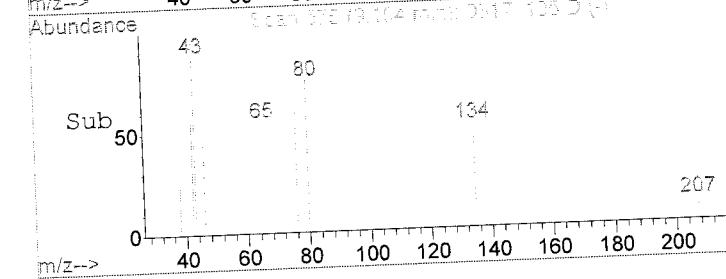
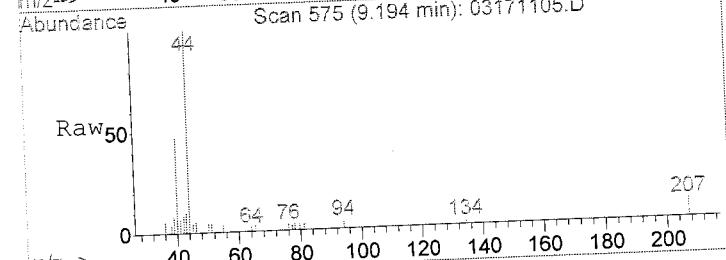
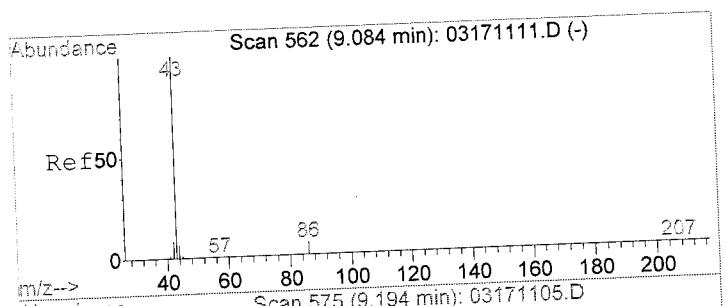
Tgt Ion: 43 Resp: 3328  
 Ion Ratio Lower Upper  
 43 100  
 58 9.7 21.2 31.8#



#13  
 Carbon disulfide  
 Concen: 0.27 ug/L  
 RT: 8.02 min Scan# 436  
 Delta R.T. -0.01 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

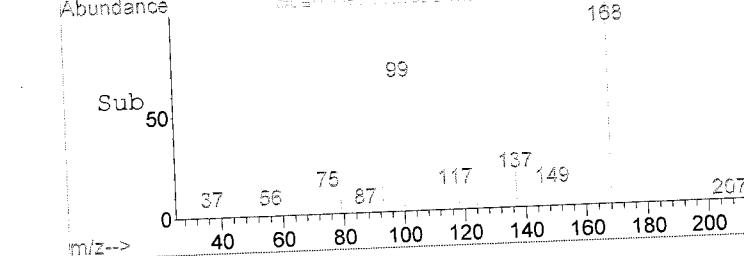
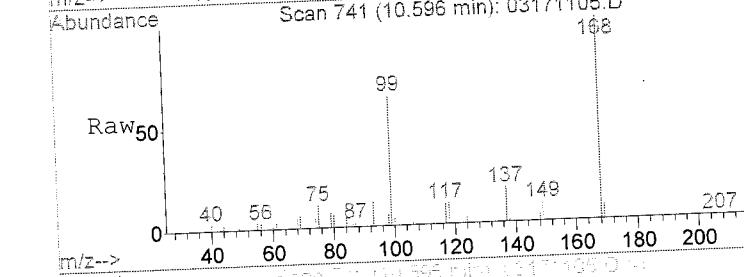
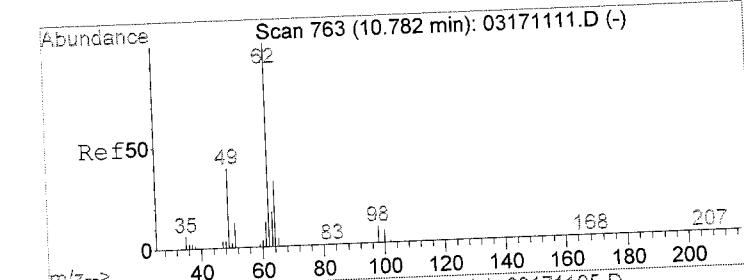
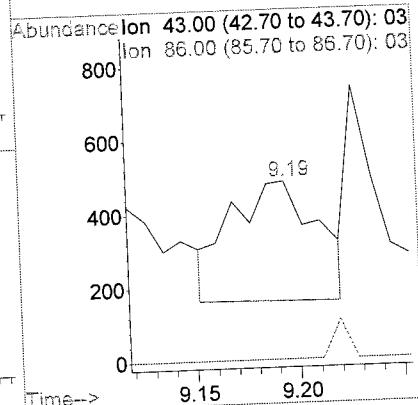
Tgt Ion: 76 Resp: 5282





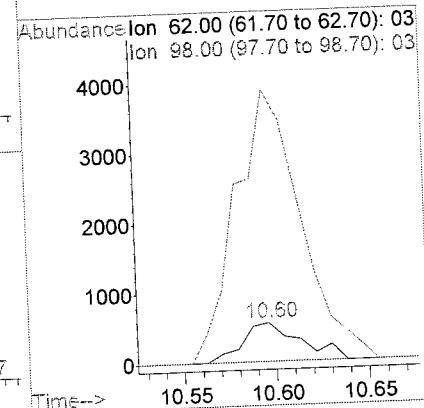
#17  
 Vinyl acetate  
 Concen: 0.10 ug/L  
 RT: 9.19 min Scan# 575  
 Delta R.T. 0.11 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

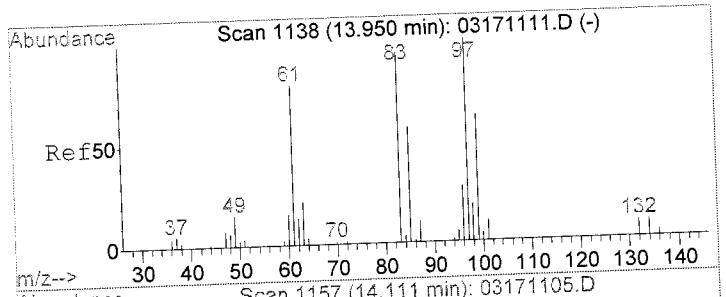
Tgt Ion: 43 Resp: 944  
 Ion Ratio Lower Upper  
 43 100  
 86 0.0 4.6 6.8#



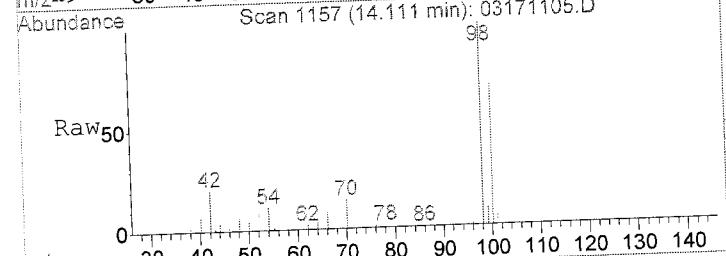
#24  
 1,2-Dichloroethane  
 Concen: 0.19 ug/L  
 RT: 10.60 min Scan# 741  
 Delta R.T. -0.19 min  
 Lab File: 03171105.D  
 Acq: 17 Mar 2011 8:41 am

Tgt Ion: 62 Resp: 1206  
 Ion Ratio Lower Upper  
 62 100  
 98 791.2 7.0 10.6#

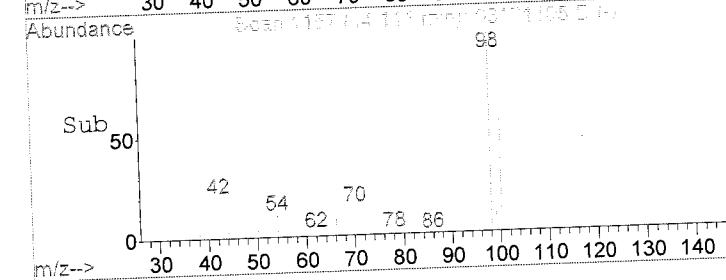




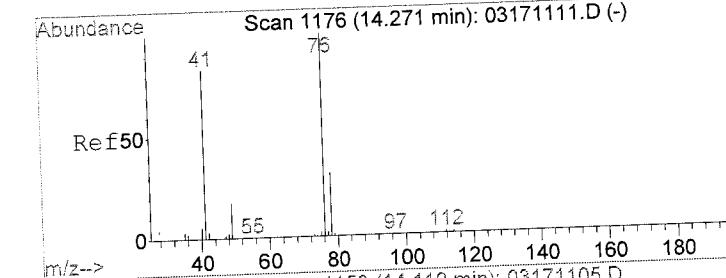
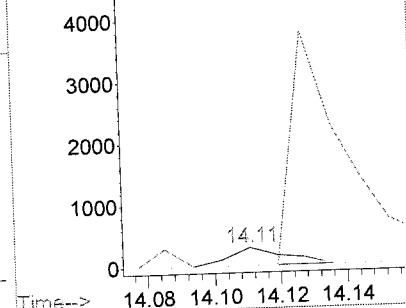
#38  
1,1,2-Trichloroethane  
Concen: 0.11 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. 0.16 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am



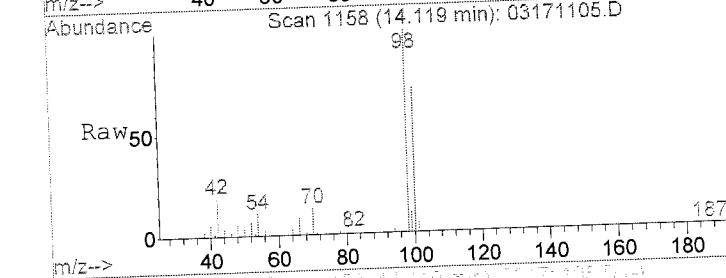
Tgt Ion: 83 Resp: 345  
Ion Ratio Lower Upper  
83 100  
97 1295.7 83.0 124.6#  
85 0.0 51.3 76.9#



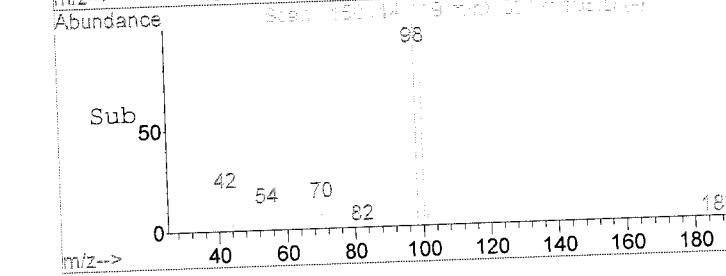
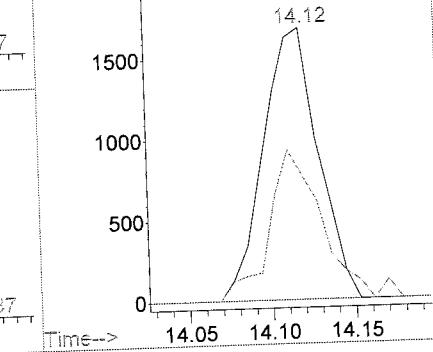
Abundance Ion 83.00 (82.70 to 83.70): 03  
Ion 97.00 (96.70 to 97.70): 03

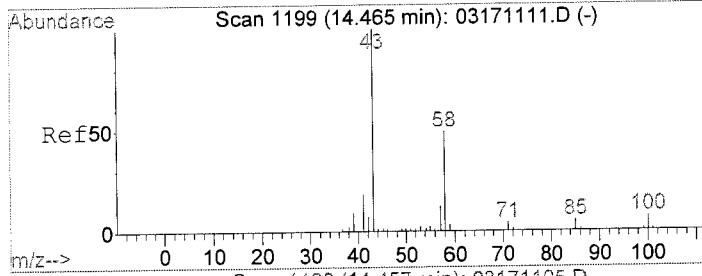


#42  
1,3-Dichloropropane  
Concen: 0.61 ug/L  
RT: 14.12 min Scan# 1158  
Delta R.T. -0.15 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

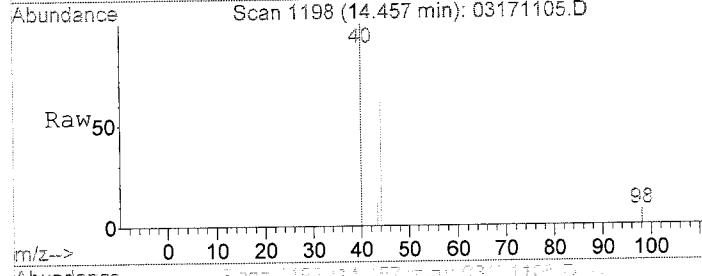


Abundance Ion 76.00 (75.70 to 76.70): 03  
Ion 78.00 (77.70 to 78.70): 03

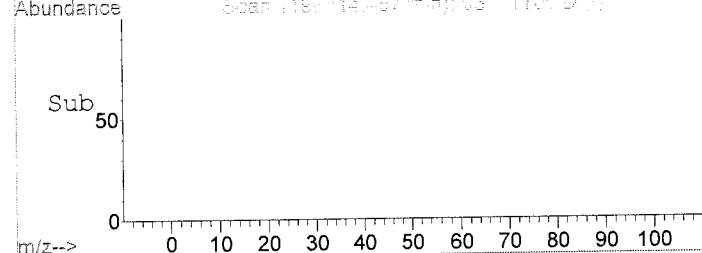




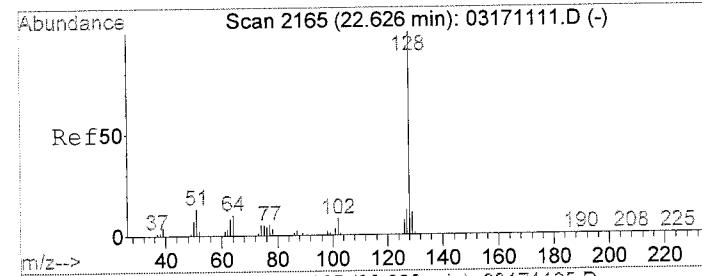
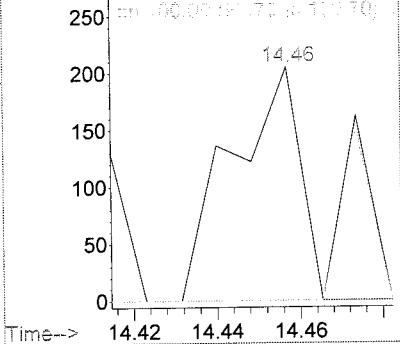
#43  
2-Hexanone  
Concen: 0.11 ug/L  
RT: 14.46 min Scan# 1198  
Delta R.T. -0.01 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am



Tgt Ion: 43 Resp: 235  
Ion Ratio Lower Upper  
43 100  
58 0.0 38.2 57.4#  
100 0.0 0.0 0.0

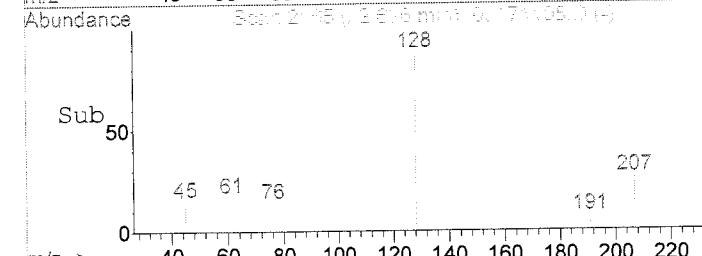
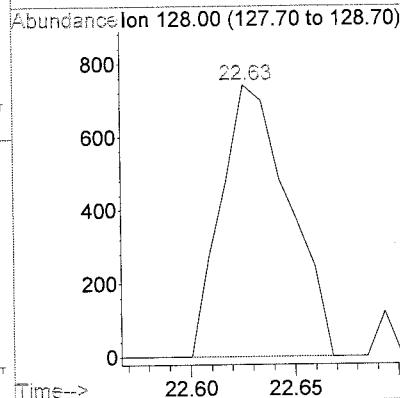
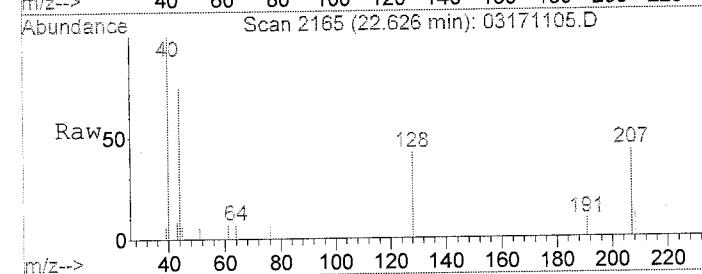


Abundance Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03  
Ion 98.00 (97.70 to 98.70): 03



#74  
Naphthalene  
Concen: 0.24 ug/L  
RT: 22.63 min Scan# 2165  
Delta R.T. 0.00 min  
Lab File: 03171105.D  
Acq: 17 Mar 2011 8:41 am

Tgt Ion: 128 Resp: 1667



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
Acq On : 17 Mar 2011 9:12 am Operator: LC  
Sample : 0.5 PPB Inst : GCMS7  
Misc : Multipllr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:36 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Results File: 031711.RES

Quant Method : C. (H) CERKIV.  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration  
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	167634	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	297798	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.08	117	243567	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	115909	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	2490	0.59	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.36%	
39) Toluene-d8	14.12	98	8971	0.60	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.40%	
53) 4-Bromofluorobenzene	17.76	95	3244	0.61	ug/L	0.00
Spiked Amount 25.000			Recovery	=	2.44%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	4286	0.54	ug/L #	90
3) Chloromethane	4.89	50	6587	0.50	ug/L	95
4) Vinyl chloride	5.18	62	6003	0.51	ug/L	90
5) Bromomethane	5.78	94	3084	0.76	ug/L	93
6) Chloroethane	5.97	64	3371	0.55	ug/L #	73
7) Trichlorofluoromethane	6.77	101	4364	0.54	ug/L	92
8) Acetone	6.93	43	1615	Below Cal	#	66
9) Iodomethane	7.58	142	1272	0.47	ug/L	92
10) 1,1-Dichloroethene	7.50	96	2883	0.61	ug/L	93
11) Methylene chloride	7.70	84	3890	0.70	ug/L	97
12) Freon 113	7.77	101	3509	0.63	ug/L	92
13) Carbon disulfide	8.02	76	10027	0.60	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	2756	0.53	ug/L #	92
15) MTBE	8.73	73	5033	0.56	ug/L #	72
16) 1,1-Dichloroethane	8.92	63	5945	0.54	ug/L	96
17) Vinyl acetate	9.08	43	4816	0.57	ug/L #	83
18) 2-Butanone (MEK)	9.46	72	199	1.62	ug/L #	34
19) cis-1,2-Dichloroethene	9.66	96	3067	0.57	ug/L	90
20) Bromochloromethane	9.87	128	1134	0.57	ug/L #	93
21) Chloroform	9.93	83	4941	0.55	ug/L	100
22) 2,2-Dichloropropane	10.04	77	3858	0.53	ug/L	100
24) 1,2-Dichloroethane	10.77	62	2927	0.53	ug/L #	76
25) 1,1,1-Trichloroethane	10.91	97	3290	0.51	ug/L #	55
27) 1,1-Dichloropropene	11.15	75	4028	0.53	ug/L	95
28) Carbon tetrachloride	11.39	117	2538	0.48	ug/L	92
29) Benzene	11.44	78	11043	0.54	ug/L	99
30) Dibromomethane	12.17	93	1308	0.54	ug/L #	87
31) 1,2-Dichloropropane	12.22	63	3128	0.55	ug/L #	97
32) Trichloroethene	12.27	95	2709	0.53	ug/L	98
33) Bromodichloromethane	12.33	83	3018	0.50	ug/L #	99
34) 2-Chlorovinylethylether	12.87	63	774	Below Cal	#	55
35) cis-1,3-Dichloropropene	13.18	75	3500	0.48	ug/L #	88
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	2046	0.69	ug/L #	82
37) trans-1,3-Dichloropropene	13.74	75	2553	0.46	ug/L #	69
38) 1,1,2-Trichloroethane	13.96	83	1372	0.51	ug/L	84
40) Toluene	14.21	92	6374	0.55	ug/L	96
42) 1,3-Dichloropropane	14.28	76	2607	0.47	ug/L	96

(#) = qualifier out of range (m) = manual integration  
03171106.D 031711.M Fri Mar 18 08:37:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:36 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Dibromochloromethane	14.65	129	2052	0.62	ug/L	85
45) 1,2-Dibromoethane	14.98	107	1293	0.47	ug/L	# 78
46) Tetrachloroethene	15.21	166	2392	0.55	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.02	131	2040	0.57	ug/L	# 53
48) Chlorobenzene	16.12	112	6227	0.54	ug/L	97
49) Ethylbenzene	16.38	91	11848	0.55	ug/L	94
50) m,p-Xylenes	16.64	106	4453	0.59	ug/L	95
51) Styrene	17.10	104	5086	0.44	ug/L	# 78
52) o-Xylene	17.20	106	4214	0.57	ug/L	96
55) Bromoform	16.81	173	696	0.41	ug/L	# 64
56) 1,1,2,2-Tetrachloroethane	17.18	83	1800	0.53	ug/L	# 93
57) 1,2,3-Trichloropropane	17.38	110	276	0.37	ug/L	# 62
58) Isopropylbenzene	17.70	105	9284	0.52	ug/L	99
59) Bromobenzene	18.05	156	1904	0.46	ug/L	83
60) n-Propylbenzene	18.31	91	13033	0.51	ug/L	97
61) 2-Chlorotoluene	18.45	91	8427	0.57	ug/L	93
62) 4-Chlorotoluene	18.56	91	8009	0.54	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	8073	0.53	ug/L	98
64) tert-Butylbenzene	19.09	119	6647	0.51	ug/L	96
65) 1,2,4-Trimethylbenzene	19.24	105	7949	0.52	ug/L	100
66) sec-Butylbenzene	19.38	105	11380	0.51	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	4456	0.53	ug/L	94
68) 1,4-Dichlorobenzene	19.56	146	4679	0.56	ug/L	# 87
69) p-Isopropyltoluene	19.61	119	8395	0.49	ug/L	94
70) 1,2-Dichlorobenzene	20.02	146	3885	0.54	ug/L	97
71) n-Butylbenzene	20.11	91	9466	0.50	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	71	0.16	ug/L	# 14
73) 1,2,4-Trichlorobenzene	22.29	180	2133	0.46	ug/L	81
74) Naphthalene	22.63	128	4307	0.69	ug/L	100
75) Hexachlorobutadiene	22.69	225	1446	0.48	ug/L	# 65
76) 1,2,3-Trichlorobenzene	22.90	180	1936	0.51	ug/L	87

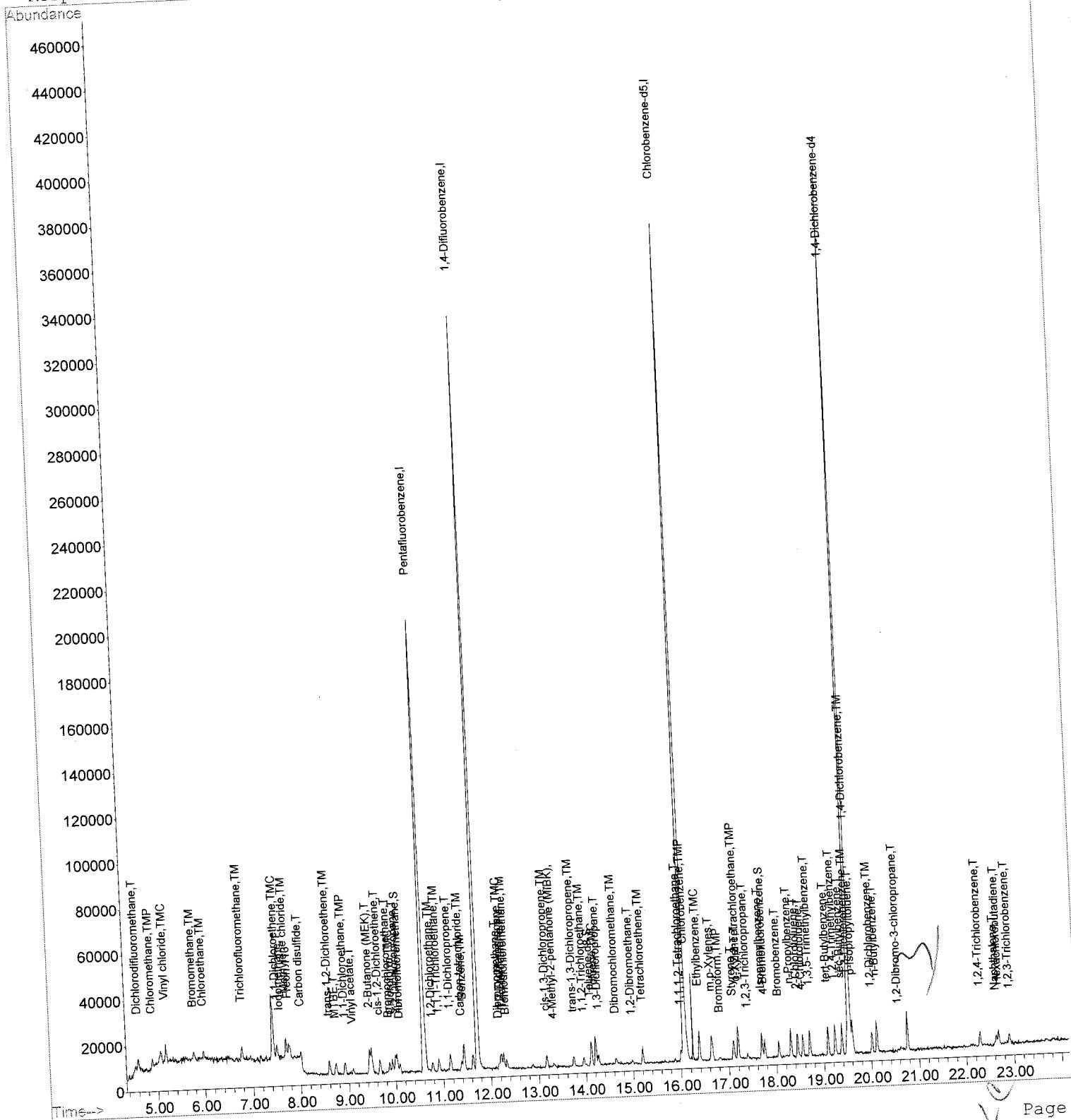
(#) = qualifier out of range (m) = manual integration  
 03171106.D 031711.M Fri Mar 18 08:37:04 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171106.D Vial: 3  
 Acq On : 17 Mar 2011 9:12 am Operator: LC  
 Sample : 0.5 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:36 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171106.D



Fri Mar 18 08:37:05 2011

106 of 262

Page

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES

Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards R.T. QIon Response Conc Units Dev (Min)

1) Pentafluorobenzene	10.60	168	163969	25.00 ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	292012	25.00 ug/L	0.00
41) Chlorobenzene-d5	16.07	117	243395	25.00 ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	113057	25.00 ug/L	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.08	113	3898	0.94	ug/L	0.00	
Spiked Amount 25.000			Recovery	=	3.76%		
39) Toluene-d8	14.12	98	14880	1.01	ug/L	0.00	
Spiked Amount 25.000			Recovery	=	4.04%		
53) 4-Bromofluorobenzene	17.76	95	5477	1.03	ug/L	0.00	
Spiked Amount 25.000			Recovery	=	4.12%		

Target Compounds		R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue
2) Dichlorodifluoromethane	4.58	85	7417	0.96	ug/L	94		
3) Chloromethane	4.89	50	11297	0.88	ug/L	99		
4) Vinyl chloride	5.18	62	11731	1.03	ug/L	#	84	
5) Bromomethane	5.77	94	5200	1.12	ug/L		94	
6) Chloroethane	5.98	64	6815	1.13	ug/L	#	88	
7) Trichlorofluoromethane	6.77	101	8152	1.03	ug/L		91	
8) Acetone	6.93	43	2180	Below Cal			96	
9) Iodomethane	7.57	142	3864	1.18	ug/L	#	86	
10) 1,1-Dichloroethene	7.51	96	5486	1.19	ug/L		97	
11) Methylene chloride	7.70	84	6767	1.24	ug/L		92	
12) Freon 113	7.78	101	6284	1.15	ug/L		98	
13) Carbon disulfide	8.02	76	17829	1.08	ug/L		100	
14) trans-1,2-Dichloroethene	8.59	96	6106	1.19	ug/L		85	
15) MTBE	8.73	73	10605	1.21	ug/L	#	88	
16) 1,1-Dichloroethane	8.92	63	12255	1.15	ug/L	#	97	
17) Vinyl acetate	9.09	43	9903	1.19	ug/L	#	93	
18) 2-Butanone (MEK)	9.48	72	190	1.60	ug/L	#	1	
19) cis-1,2-Dichloroethene	9.65	96	5176	0.98	ug/L		96	
20) Bromochloromethane	9.88	128	2006	1.03	ug/L		97	
21) Chloroform	9.93	83	8465	0.96	ug/L		99	
22) 2,2-Dichloropropane	10.03	77	6968	0.98	ug/L	#	90	
24) 1,2-Dichloroethane	10.78	62	5936	1.10	ug/L	#	76	
25) 1,1,1-Trichloroethane	10.90	97	6150	0.97	ug/L	#	56	
27) 1,1-Dichloropropene	11.15	75	7119	0.95	ug/L	#	93	
28) Carbon tetrachloride	11.39	117	4876	0.94	ug/L		98	
29) Benzene	11.44	78	20409	1.02	ug/L		97	
30) Dibromomethane	12.17	93	2529	1.07	ug/L		94	
31) 1,2-Dichloropropane	12.21	63	5383	0.96	ug/L	#	90	
32) Trichloroethene	12.26	95	4847	0.97	ug/L		95	
33) Bromodichloromethane	12.32	83	5644	0.96	ug/L	#	87	
34) 2-Chlorovinylethylether	12.86	63	1739	0.28	ug/L	#	80	
35) cis-1,3-Dichloropropene	13.18	75	6952	0.98	ug/L		95	
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	3457	1.19	ug/L	#	89	
37) trans-1,3-Dichloropropene	13.73	75	5675	1.03	ug/L		99	
38) 1,1,2-Trichloroethane	13.95	83	2621	0.99	ug/L	#	84	
40) Toluene	14.22	92	10459	0.92	ug/L		93	
42) 1,3-Dichloropropane	14.27	76	5543	1.01	ug/L	#	75	

(#) = qualifier out of range (m) = manual integration  
 03171107.D 031711.M Fri Mar 18 08:37:19 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2515	1.37	ug/L	# 71
44) Dibromochloromethane	14.65	129	2863	0.86	ug/L	97
45) 1,2-Dibromoethane	14.98	107	2446	0.88	ug/L	# 77
46) Tetrachloroethene	15.20	166	4051	0.93	ug/L	94
47) 1,1,1,2-Tetrachloroethane	16.01	131	3599	1.00	ug/L	# 59
48) Chlorobenzene	16.12	112	10976	0.96	ug/L	93
49) Ethylbenzene	16.38	91	20598	0.96	ug/L	98
50) m,p-Xylenes	16.64	106	6910	0.92	ug/L	93
51) Styrene	17.10	104	10355	0.90	ug/L	99
52) o-Xylene	17.20	106	7210	0.98	ug/L	87
55) Bromoform	16.81	173	1545	0.94	ug/L	# 76
56) 1,1,2,2-Tetrachloroethane	17.19	83	3513	1.06	ug/L	# 91
57) 1,2,3-Trichloropropane	17.38	110	807	1.12	ug/L	98
58) Isopropylbenzene	17.70	105	16311	0.94	ug/L	99
59) Bromobenzene	18.05	156	3839	0.96	ug/L	97
60) n-Propylbenzene	18.30	91	23854	0.97	ug/L	100
61) 2-Chlorotoluene	18.45	91	14160	0.98	ug/L	96
62) 4-Chlorotoluene	18.55	91	13119	0.91	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	13815	0.92	ug/L	96
64) tert-Butylbenzene	19.09	119	12127	0.95	ug/L	97
65) 1,2,4-Trimethylbenzene	19.23	105	14600	0.97	ug/L	99
66) sec-Butylbenzene	19.38	105	21187	0.97	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	7671	0.94	ug/L	93
68) 1,4-Dichlorobenzene	19.57	146	8218	1.00	ug/L	97
69) p-Isopropyltoluene	19.61	119	15312	0.92	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	6687	0.94	ug/L	99
71) n-Butylbenzene	20.11	91	17346	0.93	ug/L	96
72) 1,2-Dibromo-3-chloropropan	20.59	157	391	0.89	ug/L	94
73) 1,2,4-Trichlorobenzene	22.28	180	4683	1.02	ug/L	95
74) Naphthalene	22.63	128	5978	0.99	ug/L	100
75) Hexachlorobutadiene	22.68	225	2850	0.98	ug/L	89
76) 1,2,3-Trichlorobenzene	22.90	180	3451	0.93	ug/L	93

Page 2

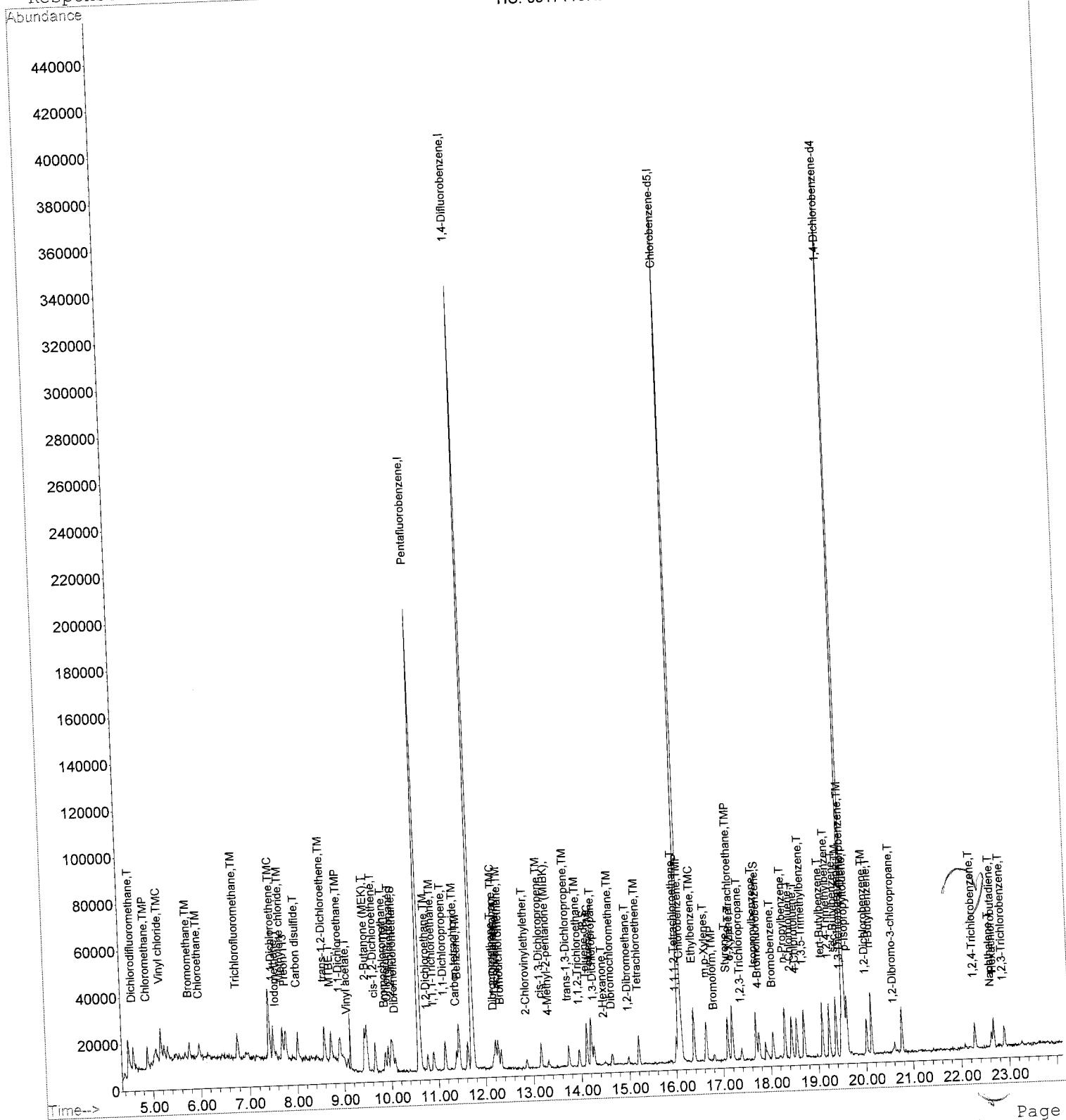
(#) = qualifier out of range (m) = manual integration  
 03171107.D 031711.M Fri Mar 18 08:37:19 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171107.D Vial: 4  
 Acq On : 17 Mar 2011 9:43 am Operator: LC  
 Sample : 1.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171107.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D  
 Acq On : 17 Mar 2011 10:14 am  
 Sample : 2.0 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Vial: 5  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	167113	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	296442	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244424	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112727	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.09	113	7767	1.85	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.40%	
39) Toluene-d8	14.12	98	28802	1.93	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.72%	
53) 4-Bromofluorobenzene	17.75	95	10411	1.94	ug/L	0.00
Spiked Amount 25.000			Recovery	=	7.76%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.60	85	15723	1.99	ug/L	96
3) Chloromethane	4.89	50	22795	1.75	ug/L	97
4) Vinyl chloride	5.18	62	22297	1.92	ug/L	95
5) Bromomethane	5.77	94	6970	1.40	ug/L	99
6) Chloroethane	5.98	64	11754	1.91	ug/L	# 83
7) Trichlorofluoromethane	6.78	101	16143	2.00	ug/L	99
8) Acetone	6.94	43	4997	1.82	ug/L	99
9) Iodomethane	7.57	142	5343	1.55	ug/L	93
10) 1,1-Dichloroethene	7.51	96	8308	1.76	ug/L	96
11) Methylene chloride	7.71	84	10726	1.93	ug/L	98
12) Freon 113	7.77	101	10221	1.83	ug/L	100
13) Carbon disulfide	8.03	76	30243	1.80	ug/L	97
14) trans-1,2-Dichloroethene	8.59	96	9562	1.83	ug/L	96
15) MTBE	8.73	73	16615	1.86	ug/L	98
16) 1,1-Dichloroethane	8.92	63	20516	1.89	ug/L	# 95
17) Vinyl acetate	9.08	43	14566	1.72	ug/L	# 1
18) 2-Butanone (MEK)	9.47	72	179	1.55	ug/L	92
19) cis-1,2-Dichloroethene	9.67	96	10907	2.02	ug/L	95
20) Bromochloromethane	9.88	128	3627	1.84	ug/L	95
21) Chloroform	9.93	83	18162	2.02	ug/L	98
22) 2,2-Dichloropropane	10.04	77	14030	1.93	ug/L	# 93
24) 1,2-Dichloroethane	10.78	62	10721	1.96	ug/L	# 92
25) 1,1,1-Trichloroethane	10.91	97	12034	1.87	ug/L	98
27) 1,1-Dichloropropene	11.15	75	14726	1.94	ug/L	94
28) Carbon tetrachloride	11.38	117	9830	1.88	ug/L	100
29) Benzene	11.44	78	39494	1.95	ug/L	92
30) Dibromomethane	12.17	93	4597	1.92	ug/L	96
31) 1,2-Dichloropropane	12.22	63	10960	1.93	ug/L	# 96
32) Trichloroethene	12.27	95	9761	1.92	ug/L	96
33) Bromodichloromethane	12.33	83	10996	1.85	ug/L	# 83
34) 2-Chlorovinylethylether	12.87	63	2637	1.16	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	13465	1.86	ug/L	94
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	5293	1.79	ug/L	# 94
37) trans-1,3-Dichloropropene	13.74	75	10352	1.86	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	5234	1.95	ug/L	96
40) Toluene	14.21	92	22811	1.98	ug/L	95
42) 1,3-Dichloropropane	14.28	76	10418	1.88	ug/L	90

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031711.M Fri Mar 18 08:37:34 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
 Acq On : 17 Mar 2011 10:14 am Operator: LC  
 Sample : 2.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.48	43	2474	1.34	ug/L #	88
44) Dibromochloromethane	14.65	129	6238	1.88	ug/L	98
45) 1,2-Dibromoethane	14.99	107	5443	1.96	ug/L #	98
46) Tetrachloroethene	15.21	166	8224	1.88	ug/L	98
47) 1,1,1,2-Tetrachloroethane	16.01	131	6797	1.88	ug/L	92
48) Chlorobenzene	16.12	112	21803	1.90	ug/L	90
49) Ethylbenzene	16.38	91	40622	1.88	ug/L	100
50) m,p-Xylenes	16.64	106	14567	1.92	ug/L	98
51) Styrene	17.09	104	21955	1.91	ug/L	99
52) o-Xylene	17.19	106	14080	1.91	ug/L	99
55) Bromoform	16.81	173	2978	1.82	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	6680	2.02	ug/L	93
57) 1,2,3-Trichloropropane	17.40	110	1450	2.02	ug/L	94
58) Isopropylbenzene	17.69	105	34246	1.98	ug/L	99
59) Bromobenzene	18.05	156	7927	1.99	ug/L	96
60) n-Propylbenzene	18.30	91	47531	1.93	ug/L	98
61) 2-Chlorotoluene	18.44	91	27642	1.91	ug/L	99
62) 4-Chlorotoluene	18.55	91	28051	1.96	ug/L	98
63) 1,3,5-Trimethylbenzene	18.71	105	28488	1.91	ug/L	97
64) tert-Butylbenzene	19.09	119	24316	1.91	ug/L	95
65) 1,2,4-Trimethylbenzene	19.24	105	29321	1.96	ug/L	95
66) sec-Butylbenzene	19.38	105	43119	1.98	ug/L	97
67) 1,3-Dichlorobenzene	19.48	146	16064	1.98	ug/L	97
68) 1,4-Dichlorobenzene	19.57	146	15950	1.95	ug/L	99
69) p-Isopropyltoluene	19.61	119	32053	1.93	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	13744	1.95	ug/L	97
71) n-Butylbenzene	20.12	91	35106	1.90	ug/L	79
72) 1,2-Dibromo-3-chloropropan	20.59	157	972	2.21	ug/L #	96
73) 1,2,4-Trichlorobenzene	22.29	180	8342	1.83	ug/L	100
74) Naphthalene	22.63	128	10824	1.79	ug/L	99
75) Hexachlorobutadiene	22.68	225	5711	1.96	ug/L	94
76) 1,2,3-Trichlorobenzene	22.90	180	7016	1.89	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03171108.D 031711.M Fri Mar 18 08:37:34 2011

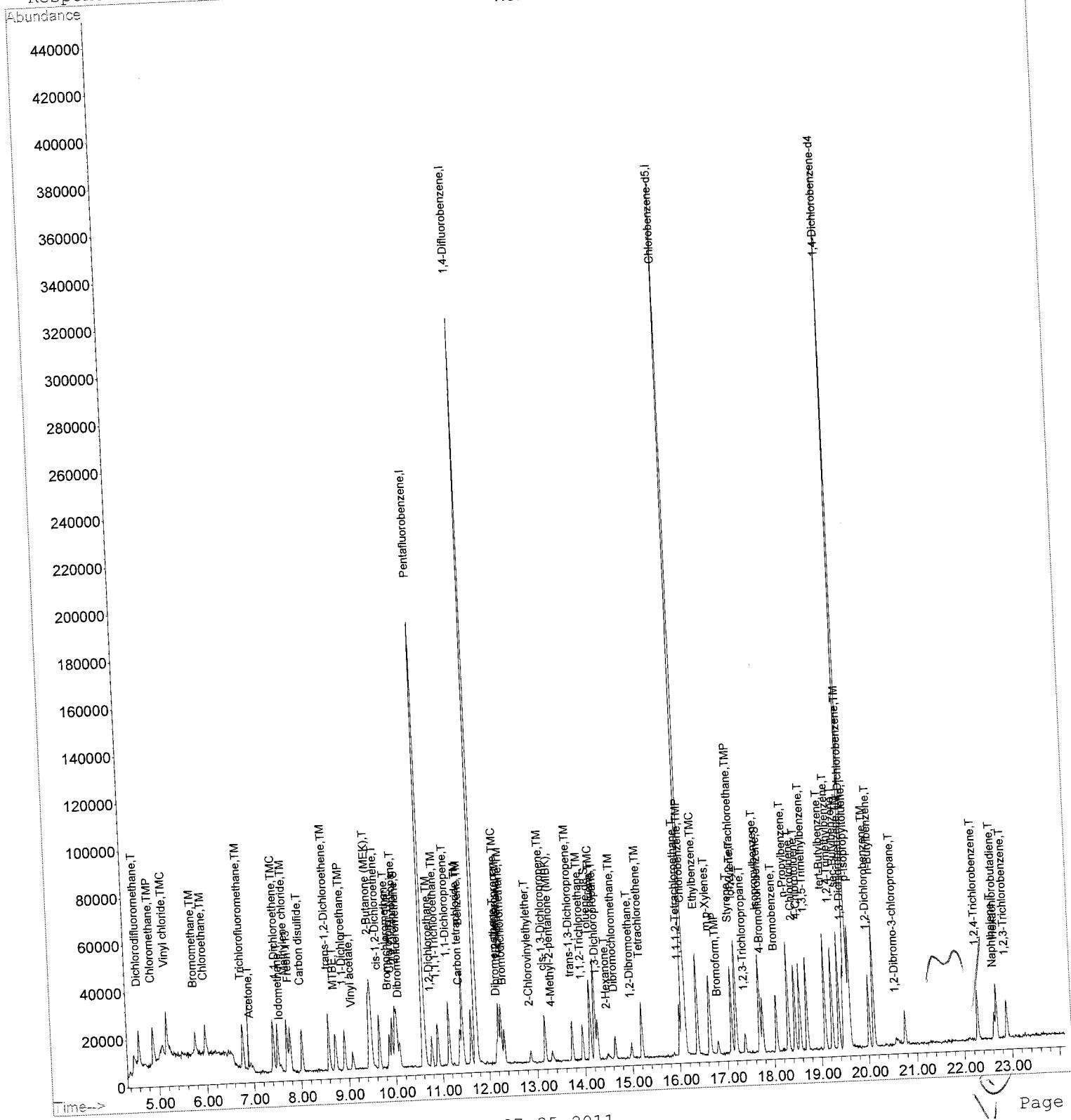
Page

## Quantitation Report

Quantitative Data File  
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171108.D Vial: 5  
Acq On : 17 Mar 2011 10:14 am Operator: LC  
Sample : 2.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS\METHODS\03171108.D  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration

TIC: 03171108.D



03171108.D 031711.M

Fri Mar 18 08:37:35 2011

112 of 262

Page

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	10.60	168	163825	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	296778	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	247195	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115762	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	22772	5.52	ug/L	0.00
Spiked Amount 25.000			Recovery	=	22.08%	
39) Toluene-d8	14.12	98	75601	5.05	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.20%	
53) 4-Bromofluorobenzene	17.75	95	27636	5.10	ug/L	0.00
Spiked Amount 25.000			Recovery	=	20.40%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	43993	5.68	ug/L	96
3) Chloromethane	4.90	50	69304	5.42	ug/L	98
4) Vinyl chloride	5.18	62	59531	5.23	ug/L	97
5) Bromomethane	5.77	94	23286	4.14	ug/L	93
6) Chloroethane	5.98	64	31380	5.20	ug/L	95
7) Trichlorofluoromethane	6.78	101	44900	5.67	ug/L	97
8) Acetone	6.94	43	8551	6.12	ug/L	98
9) Iodomethane	7.57	142	19144	5.33	ug/L	97
10) 1,1-Dichloroethene	7.51	96	23635	5.12	ug/L	97
11) Methylene chloride	7.71	84	29505	5.43	ug/L	97
12) Freon 113	7.78	101	28220	5.16	ug/L	99
13) Carbon disulfide	8.03	76	88631	5.39	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	27352	5.35	ug/L	91
15) MTBE	8.74	73	47481	5.43	ug/L	99
16) 1,1-Dichloroethane	8.92	63	57409	5.38	ug/L	99
17) Vinyl acetate	9.09	43	45219	5.46	ug/L	98
18) 2-Butanone (MEK)	9.47	72	1224	5.50	ug/L	# 37
19) cis-1,2-Dichloroethene	9.66	96	29437	5.56	ug/L	94
20) Bromochloromethane	9.87	128	11063	5.71	ug/L	95
21) Chloroform	9.93	83	49311	5.60	ug/L	96
22) 2,2-Dichloropropane	10.04	77	39536	5.54	ug/L	100
24) 1,2-Dichloroethane	10.78	62	29254	5.45	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	35039	5.54	ug/L	98
27) 1,1-Dichloropropene	11.15	75	40021	5.27	ug/L	98
28) Carbon tetrachloride	11.38	117	28340	5.40	ug/L	98
29) Benzene	11.44	78	106054	5.22	ug/L	98
30) Dibromomethane	12.17	93	12758	5.31	ug/L	97
31) 1,2-Dichloropropane	12.21	63	30926	5.45	ug/L	99
32) Trichloroethene	12.26	95	27719	5.46	ug/L	95
33) Bromodichloromethane	12.33	83	32710	5.49	ug/L	96
34) 2-Chlorovinylethylether	12.86	63	7315	5.89	ug/L	96
35) cis-1,3-Dichloropropene	13.17	75	39480	5.45	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.32	43	15268	5.15	ug/L	96
37) trans-1,3-Dichloropropene	13.73	75	29993	5.37	ug/L	97
38) 1,1,2-Trichloroethane	13.96	83	14498	5.40	ug/L	99
40) Toluene	14.21	92	60380	5.23	ug/L	98
42) 1,3-Dichloropropane	14.27	76	31749	5.68	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171109.D 031711.M Fri Mar 18 08:37:49 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
 Acq On : 17 Mar 2011 10:45 am Operator: LC  
 Sample : 5.0 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	10625	5.70	ug/L	# 86
44) Dibromochloromethane	14.64	129	17145	5.10	ug/L	98
45) 1,2-Dibromoethane	14.98	107	15883	5.66	ug/L	# 98
46) Tetrachloroethene	15.21	166	22589	5.10	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.00	131	18388	5.02	ug/L	96
48) Chlorobenzene	16.12	112	60084	5.17	ug/L	96
49) Ethylbenzene	16.38	91	112334	5.13	ug/L	99
50) m,p-Xylenes	16.64	106	39718	5.18	ug/L	100
51) Styrene	17.09	104	62548	5.38	ug/L	98
52) o-Xylene	17.20	106	38050	5.11	ug/L	98
55) Bromoform	16.81	173	9209	5.49	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.18	83	17802	5.25	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	4203	5.70	ug/L	90
58) Isopropylbenzene	17.69	105	91339	5.15	ug/L	98
59) Bromobenzene	18.05	156	21568	5.27	ug/L	95
60) n-Propylbenzene	18.30	91	134531	5.32	ug/L	98
61) 2-Chlorotoluene	18.45	91	75803	5.11	ug/L	100
62) 4-Chlorotoluene	18.55	91	77070	5.24	ug/L	97
63) 1,3,5-Trimethylbenzene	18.70	105	79213	5.17	ug/L	100
64) tert-Butylbenzene	19.09	119	66536	5.10	ug/L	98
65) 1,2,4-Trimethylbenzene	19.23	105	78965	5.13	ug/L	99
66) sec-Butylbenzene	19.37	105	115485	5.17	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	42641	5.12	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	42358	5.05	ug/L	97
69) p-Isopropyltoluene	19.60	119	87337	5.11	ug/L	97
70) 1,2-Dichlorobenzene	20.01	146	38242	5.28	ug/L	99
71) n-Butylbenzene	20.12	91	99714	5.24	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	2137	4.73	ug/L	90
73) 1,2,4-Trichlorobenzene	22.28	180	24323	5.20	ug/L	100
74) Naphthalene	22.63	128	32491	5.23	ug/L	100
75) Hexachlorobutadiene	22.68	225	14709	4.92	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	20581	5.39	ug/L	98

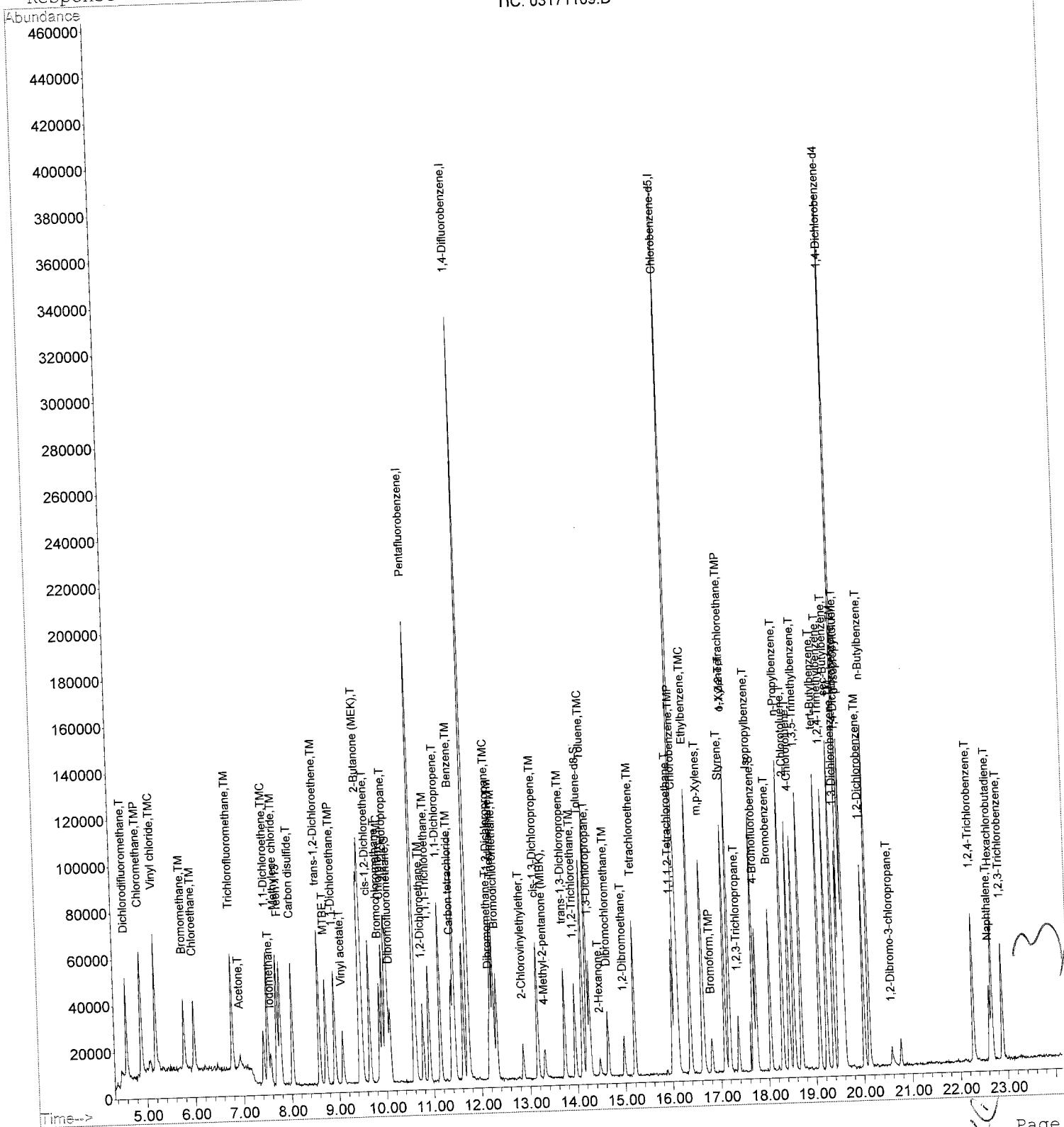
(#) = qualifier out of range (m) = manual integration  
 03171109.D 031711.M Fri Mar 18 08:37:49 2011

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171109.D Vial: 6  
Acq On : 17 Mar 2011 10:45 am Operator: LC  
Sample : 5.0 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration TIC: 03171109.D

TIC: 03171109.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES

Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	166762	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	295309	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	244841	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	109771	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	42710	10.18	ug/L	0.00
Spiked Amount 25.000			Recovery =	40.72%		
39) Toluene-d8	14.12	98	143321	9.62	ug/L	0.00
Spiked Amount 25.000			Recovery =	38.48%		
53) 4-Bromofluorobenzene	17.75	95	50923	9.49	ug/L	0.00
Spiked Amount 25.000			Recovery =	37.96%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	79957	10.15	ug/L	99
3) Chloromethane	4.89	50	135497	10.40	ug/L	99
4) Vinyl chloride	5.19	62	111850	9.64	ug/L	99
5) Bromomethane	5.78	94	53427	9.01	ug/L	95
6) Chloroethane	5.98	64	63788	10.38	ug/L	99
7) Trichlorofluoromethane	6.78	101	85392	10.59	ug/L	98
8) Acetone	6.94	43	11502	9.36	ug/L	99
9) Iodomethane	7.57	142	36401	9.84	ug/L	98
10) 1,1-Dichloroethane	7.51	96	46909	9.97	ug/L	96
11) Methylene chloride	7.71	84	55460	10.02	ug/L	99
12) Freon 113	7.78	101	52409	9.41	ug/L	98
13) Carbon disulfide	8.03	76	162804	9.73	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	51126	9.82	ug/L	96
15) MTBE	8.74	73	84759	9.53	ug/L	97
16) 1,1-Dichloroethane	8.92	63	108838	10.03	ug/L	99
17) Vinyl acetate	9.09	43	81810	9.70	ug/L	100
18) 2-Butanone (MEK)	9.47	72	2658	10.73	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	53573	9.94	ug/L	99
20) Bromochloromethane	9.88	128	20976	10.64	ug/L	95
21) Chloroform	9.93	83	95119	10.62	ug/L	99
22) 2,2-Dichloropropane	10.04	77	73939	10.18	ug/L	100
24) 1,2-Dichloroethane	10.77	62	53618	9.81	ug/L	99
25) 1,1,1-Trichloroethane	10.91	97	66517	10.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	77127	10.20	ug/L	98
28) Carbon tetrachloride	11.39	117	54162	10.38	ug/L	98
29) Benzene	11.44	78	201076	9.95	ug/L	99
30) Dibromomethane	12.17	93	24596	10.29	ug/L	97
31) 1,2-Dichloropropane	12.21	63	55294	9.80	ug/L	99
32) Trichloroethene	12.27	95	49861	9.87	ug/L	99
33) Bromodichloromethane	12.33	83	60334	10.17	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	12810	11.51	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	73950	10.27	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	28976	9.82	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	56973	10.25	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	27640	10.34	ug/L	99
40) Toluene	14.21	92	114354	9.95	ug/L	98
42) 1,3-Dichloropropane	14.27	76	56624	10.22	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 0317110.D 031711.M Fri Mar 18 08:38:05 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	17603	9.53	ug/L	# 98
44) Dibromochloromethane	14.64	129	32389	9.72	ug/L	99
45) 1,2-Dibromoethane	14.98	107	28536	10.26	ug/L	97
46) Tetrachloroethene	15.21	166	44478	10.13	ug/L	97
47) 1,1,1,2-Tetrachloroethane	16.01	131	35495	9.79	ug/L	98
48) Chlorobenzene	16.12	112	113625	9.87	ug/L	99
49) Ethylbenzene	16.38	91	215370	9.93	ug/L	100
50) m,p-Xylenes	16.64	106	74201	9.77	ug/L	99
51) Styrene	17.09	104	115227	10.01	ug/L	100
52) o-Xylene	17.20	106	71920	9.74	ug/L	99
55) Bromoform	16.81	173	16316	10.27	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	33308	10.36	ug/L	# 97
57) 1,2,3-Trichloropropane	17.39	110	7243	10.36	ug/L	91
58) Isopropylbenzene	17.69	105	176438	10.50	ug/L	99
59) Bromobenzene	18.05	156	40825	10.53	ug/L	99
60) n-Propylbenzene	18.30	91	250684	10.45	ug/L	100
61) 2-Chlorotoluene	18.45	91	143690	10.22	ug/L	99
62) 4-Chlorotoluene	18.55	91	141563	10.16	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	151285	10.42	ug/L	99
64) tert-Butylbenzene	19.09	119	128292	10.37	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	149598	10.25	ug/L	99
66) sec-Butylbenzene	19.37	105	214687	10.13	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	80400	10.17	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	78217	9.83	ug/L	100
69) p-Isopropyltoluene	19.61	119	168592	10.41	ug/L	98
70) 1,2-Dichlorobenzene	20.02	146	69024	10.04	ug/L	100
71) n-Butylbenzene	20.12	91	183374	10.17	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.57	157	4643	10.84	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	41924	9.44	ug/L	100
74) Naphthalene	22.63	128	55616	9.45	ug/L	100
75) Hexachlorobutadiene	22.68	225	29027	10.24	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	34759	9.60	ug/L	98

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V

(#) = qualifier out of range (m) = manual integration  
 03171110.D 031711.M Fri Mar 18 08:38:05 2011

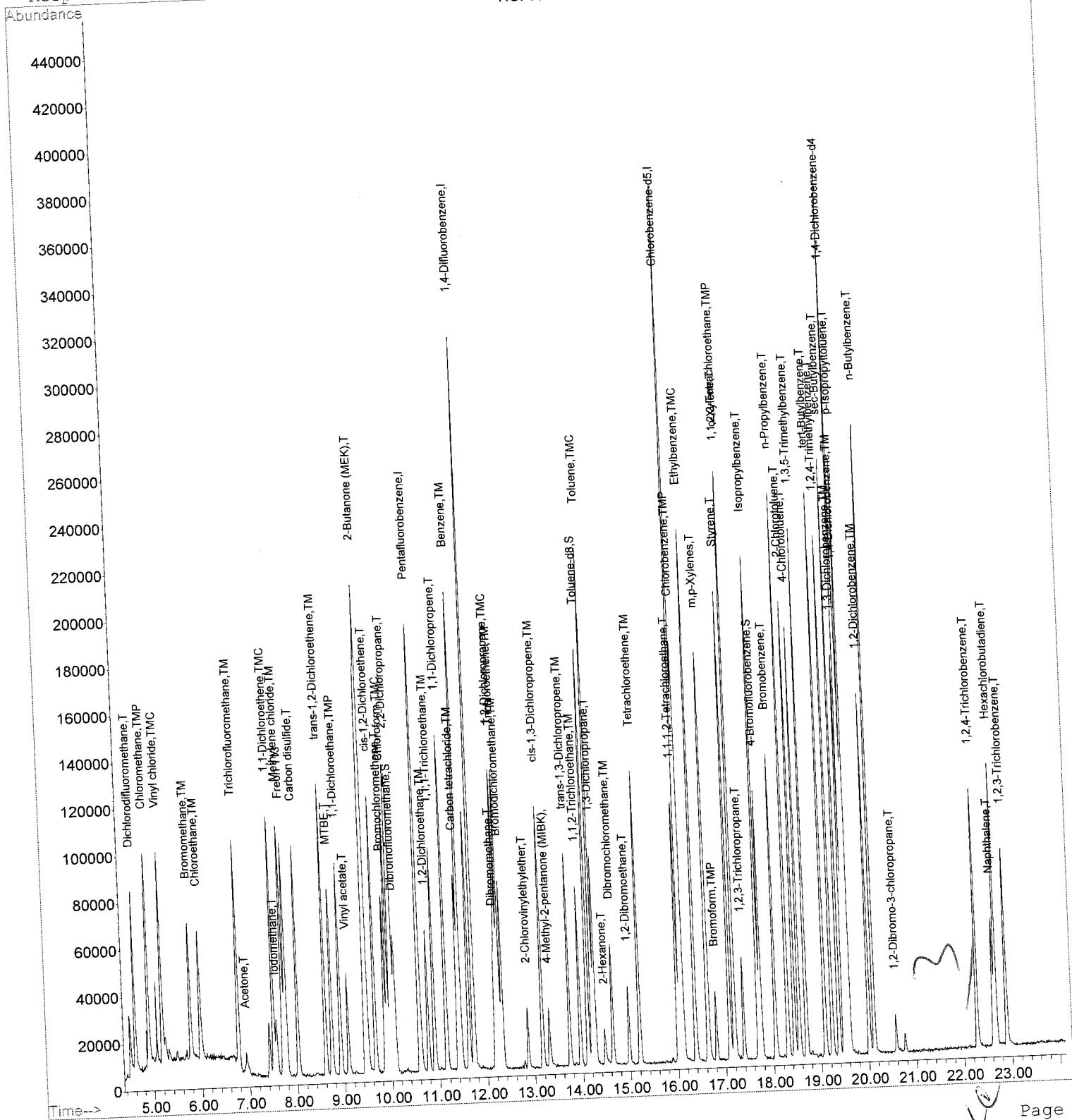
Page

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171110.D Vial: 7  
 Acq On : 17 Mar 2011 11:15 am Operator: LC  
 Sample : 10 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:37 2011 Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:37 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171110.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00

MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	164363	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	291205	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	242488	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	112264	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	103380	25.00	ug/L	0.00
Spiked Amount 25.000			Recovery = 100.00%			
39) Toluene-d8	14.12	98	359841	24.50	ug/L	0.00
Spiked Amount 25.000			Recovery = 98.00%			
53) 4-Bromofluorobenzene	17.75	95	128707	24.22	ug/L	0.00
Spiked Amount 25.000			Recovery = 96.88%			
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	200064	25.77	ug/L	100
3) Chloromethane	4.89	50	322628	25.13	ug/L	100
4) Vinyl chloride	5.18	62	283499	24.80	ug/L	100
5) Bromomethane	5.78	94	141242	23.74	ug/L	100
6) Chloroethane	5.98	64	150117	24.77	ug/L	100
7) Trichlorofluoromethane	6.78	101	214158	26.95	ug/L	100
8) Acetone	6.94	43	25928	26.49	ug/L	100
9) Iodomethane	7.57	142	98109	26.69	ug/L	100
10) 1,1-Dichloroethene	7.51	96	111502	24.05	ug/L	100
11) Methylene chloride	7.71	84	132209	24.24	ug/L	100
12) Freon 113	7.77	101	133636	24.35	ug/L	100
13) Carbon disulfide	8.03	76	401884	24.37	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	126832	24.73	ug/L	100
15) MTBE	8.74	73	214946	24.52	ug/L	100
16) 1,1-Dichloroethane	8.92	63	264682	24.74	ug/L	100
17) Vinyl acetate	9.08	43	202265	24.34	ug/L	100
18) 2-Butanone (MEK)	9.47	72	6903	26.82	ug/L	100
19) cis-1,2-Dichloroethene	9.66	96	131490	24.75	ug/L	100
20) Bromochloromethane	9.87	128	47437	24.40	ug/L	100
21) Chloroform	9.93	83	218360	24.73	ug/L	100
22) 2,2-Dichloropropane	10.04	77	180118	25.16	ug/L	100
24) 1,2-Dichloroethane	10.78	62	136474	25.33	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	162207	25.58	ug/L	100
27) 1,1-Dichloropropene	11.15	75	191506	25.69	ug/L	100
28) Carbon tetrachloride	11.39	117	133369	25.91	ug/L	100
29) Benzene	11.44	78	490622	24.62	ug/L	100
30) Dibromomethane	12.17	93	58067	24.63	ug/L	100
31) 1,2-Dichloropropane	12.21	63	140014	25.15	ug/L	100
32) Trichloroethene	12.27	95	124690	25.02	ug/L	100
33) Bromodichloromethane	12.33	83	150764	25.77	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	29010	28.39	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	183565	25.85	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.31	43	71494	24.58	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	141331	25.79	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	66374	25.19	ug/L	100
40) Toluene	14.21	92	282149	24.90	ug/L	100
42) 1,3-Dichloropropane	14.27	76	140210	25.55	ug/L	100

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031711.M Fri Mar 18 08:38:20 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D Vial: 8  
 Acq On : 17 Mar 2011 11:46 am Operator: LC  
 Sample : 25 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.47	43	44449	24.30	ug/L	# 100
44) Dibromochloromethane	14.64	129	81864	24.81	ug/L	100
45) 1,2-Dibromoethane	14.98	107	70424	25.57	ug/L	100
46) Tetrachloroethene	15.21	166	109364	25.15	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	87769	24.44	ug/L	100
48) Chlorobenzene	16.12	112	284407	24.96	ug/L	100
49) Ethylbenzene	16.37	91	538674	25.09	ug/L	100
50) m,p-Xylenes	16.64	106	186494	24.80	ug/L	100
51) Styrene	17.09	104	295005	25.87	ug/L	100
52) o-Xylene	17.19	106	177920	24.34	ug/L	100
55) Bromoform	16.81	173	42372	26.07	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	82184	25.00	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18834	26.34	ug/L	100
58) Isopropylbenzene	17.69	105	445254	25.90	ug/L	100
59) Bromobenzene	18.05	156	105054	26.49	ug/L	100
60) n-Propylbenzene	18.30	91	632559	25.78	ug/L	100
61) 2-Chlorotoluene	18.44	91	364433	25.35	ug/L	100
62) 4-Chlorotoluene	18.55	91	369067	25.89	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	381972	25.71	ug/L	100
64) tert-Butylbenzene	19.09	119	324112	25.63	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	382900	25.64	ug/L	100
66) sec-Butylbenzene	19.37	105	556785	25.69	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	205642	25.45	ug/L	100
68) 1,4-Dichlorobenzene	19.57	146	201942	24.82	ug/L	100
69) p-Isopropyltoluene	19.61	119	434002	26.19	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	178826	25.44	ug/L	100
71) n-Butylbenzene	20.12	91	487367	26.43	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	11318	25.84	ug/L	100
73) 1,2,4-Trichlorobenzene	22.28	180	122376	26.96	ug/L	100
74) Naphthalene	22.63	128	163821	27.21	ug/L	100
75) Hexachlorobutadiene	22.69	225	76790	26.49	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	101564	27.44	ug/L	100

Page 1

(#) = qualifier out of range (m) = manual integration  
 03171111.D 031711.M Fri Mar 18 08:38:21 2011

Quantitation Report

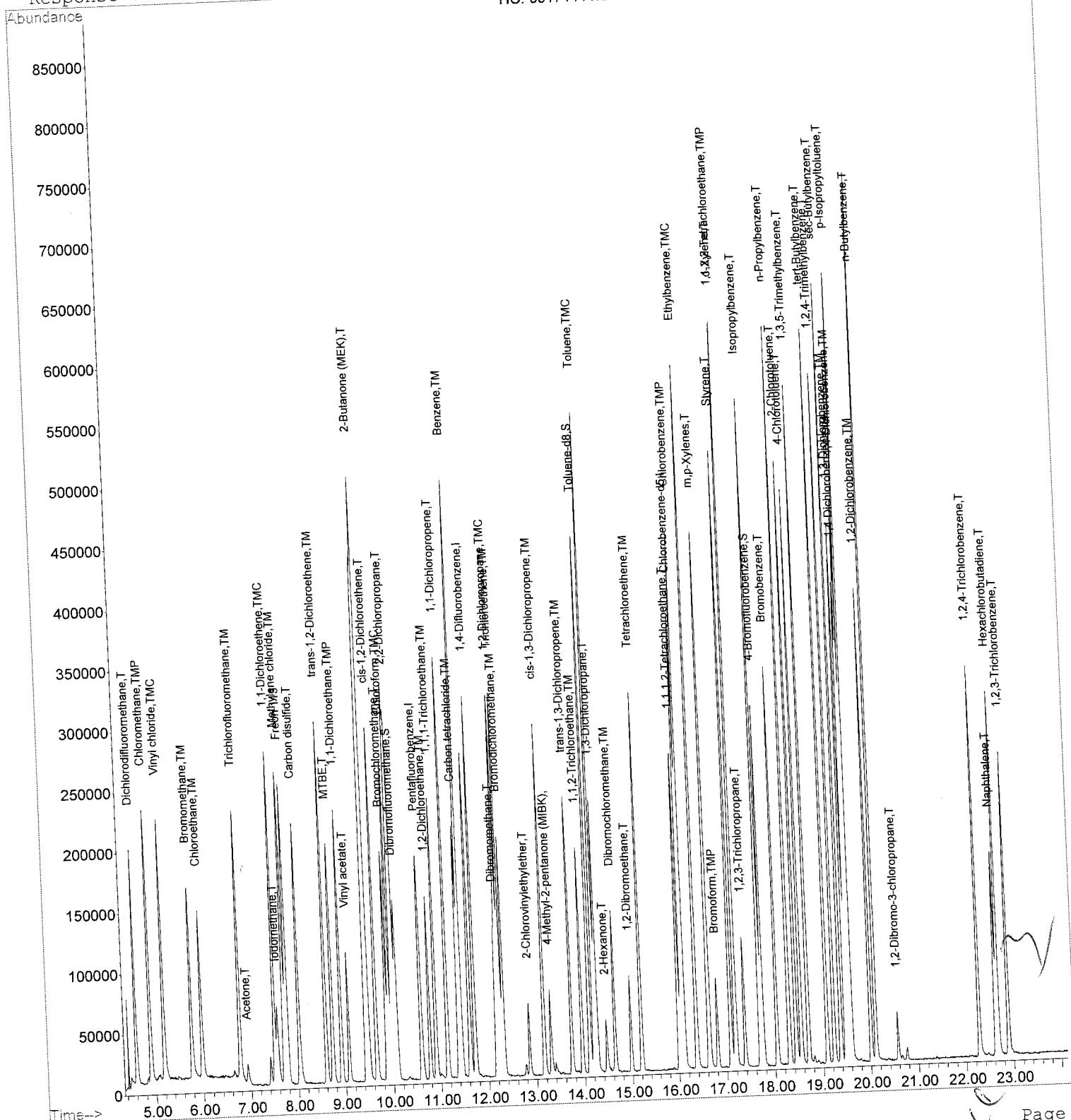
Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171111.D  
 Acq On : 17 Mar 2011 11:46 am  
 Sample : 25 PPB  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011

Vial: 8  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171111.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.60	168	172725	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	302991	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251334	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	115948	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	202044	46.49	ug/L	0.00
Spiked Amount 25.000			Recovery	= 185.96%		
39) Toluene-d8	14.11	98	726789	47.56	ug/L	0.00
Spiked Amount 25.000			Recovery	= 190.24%		
53) 4-Bromofluorobenzene	17.76	95	259969	47.19	ug/L	0.00
Spiked Amount 25.000			Recovery	= 188.76%		
Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.60	85	391099	47.93	ug/L	98
3) Chloromethane	4.90	50	687656	50.97	ug/L	99
4) Vinyl chloride	5.18	62	596978	49.70	ug/L	98
5) Bromomethane	5.78	94	296252	47.13	ug/L	98
6) Chloroethane	5.99	64	300876	47.25	ug/L	99
7) Trichlorofluoromethane	6.78	101	340516	40.77	ug/L	97
8) Acetone	6.93	43	44278	45.51	ug/L	99
9) Iodomethane	7.58	142	195341	50.45	ug/L	98
10) 1,1-Dichloroethene	7.52	96	220268	45.21	ug/L	99
11) Methylene chloride	7.71	84	264019	46.07	ug/L	99
12) Freon 113	7.78	101	262900	45.58	ug/L	99
13) Carbon disulfide	8.03	76	807912	46.61	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	248724	46.15	ug/L	98
15) MTBE	8.73	73	407385	44.23	ug/L	99
16) 1,1-Dichloroethane	8.92	63	517515	46.02	ug/L	99
17) Vinyl acetate	9.08	43	400997	45.91	ug/L	99
18) 2-Butanone (MEK)	9.47	72	13656	49.70	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	257331	46.10	ug/L	99
20) Bromochloromethane	9.87	128	96376	47.18	ug/L	96
21) Chloroform	9.93	83	424654	45.77	ug/L	99
22) 2,2-Dichloropropane	10.03	77	364919	48.51	ug/L	99
24) 1,2-Dichloroethane	10.78	62	261605	46.20	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	323769	48.60	ug/L	99
27) 1,1-Dichloropropene	11.15	75	381624	49.20	ug/L	99
28) Carbon tetrachloride	11.39	117	268038	50.05	ug/L	100
29) Benzene	11.44	78	1008066	48.61	ug/L	98
30) Dibromomethane	12.17	93	116662	47.55	ug/L	98
31) 1,2-Dichloropropane	12.21	63	281688	48.64	ug/L	100
32) Trichloroethene	12.26	95	255144	49.21	ug/L	99
33) Bromodichloromethane	12.33	83	300337	49.34	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	52192	50.19	ug/L	97
35) cis-1,3-Dichloropropene	13.17	75	364674	49.35	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	143476	47.40	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	289421	50.75	ug/L	100
38) 1,1,2-Trichloroethane	13.95	83	131924	48.12	ug/L	99
40) Toluene	14.22	92	583744	49.52	ug/L	98
42) 1,3-Dichloropropane	14.27	76	277506	48.79	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03171112.D 031711.M Fri Mar 18 08:38:39 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	96547	50.92	ug/L	# 94
44) Dibromochloromethane	14.65	129	168655	49.32	ug/L	98
45) 1,2-Dibromoethane	14.98	107	142279	49.83	ug/L	97
46) Tetrachloroethene	15.20	166	223148	49.50	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	180404	48.47	ug/L	97
48) Chlorobenzene	16.12	112	576756	48.83	ug/L	99
49) Ethylbenzene	16.38	91	1095906	49.25	ug/L	100
50) m,p-Xylenes	16.64	106	376516	48.30	ug/L	98
51) Styrene	17.10	104	602783	50.99	ug/L	99
52) o-Xylene	17.20	106	366193	48.33	ug/L	97
55) Bromoform	16.82	173	87491	52.11	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	166424	49.02	ug/L	99
57) 1,2,3-Trichloropropane	17.38	110	37111	50.24	ug/L	96
58) Isopropylbenzene	17.70	105	904235	50.93	ug/L	99
59) Bromobenzene	18.05	156	210716	51.44	ug/L	100
60) n-Propylbenzene	18.30	91	1279523	50.48	ug/L	100
61) 2-Chlorotoluene	18.45	91	736550	49.60	ug/L	100
62) 4-Chlorotoluene	18.55	91	740782	50.32	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	763223	49.75	ug/L	100
64) tert-Butylbenzene	19.09	119	661664	50.66	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	772492	50.09	ug/L	100
66) sec-Butylbenzene	19.38	105	1121222	50.08	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	414698	49.68	ug/L	98
68) 1,4-Dichlorobenzene	19.57	146	411367	48.95	ug/L	100
69) p-Isopropyltoluene	19.61	119	866615	50.64	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	359735	49.55	ug/L	99
71) n-Butylbenzene	20.11	91	964633	50.65	ug/L	91
72) 1,2-Dibromo-3-chloropropan	20.58	157	22554	49.85	ug/L	99
73) 1,2,4-Trichlorobenzene	22.28	180	240360	51.26	ug/L	100
74) Naphthalene	22.63	128	314469	50.58	ug/L	100
75) Hexachlorobutadiene	22.68	225	150589	50.29	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	192513	50.36	ug/L	

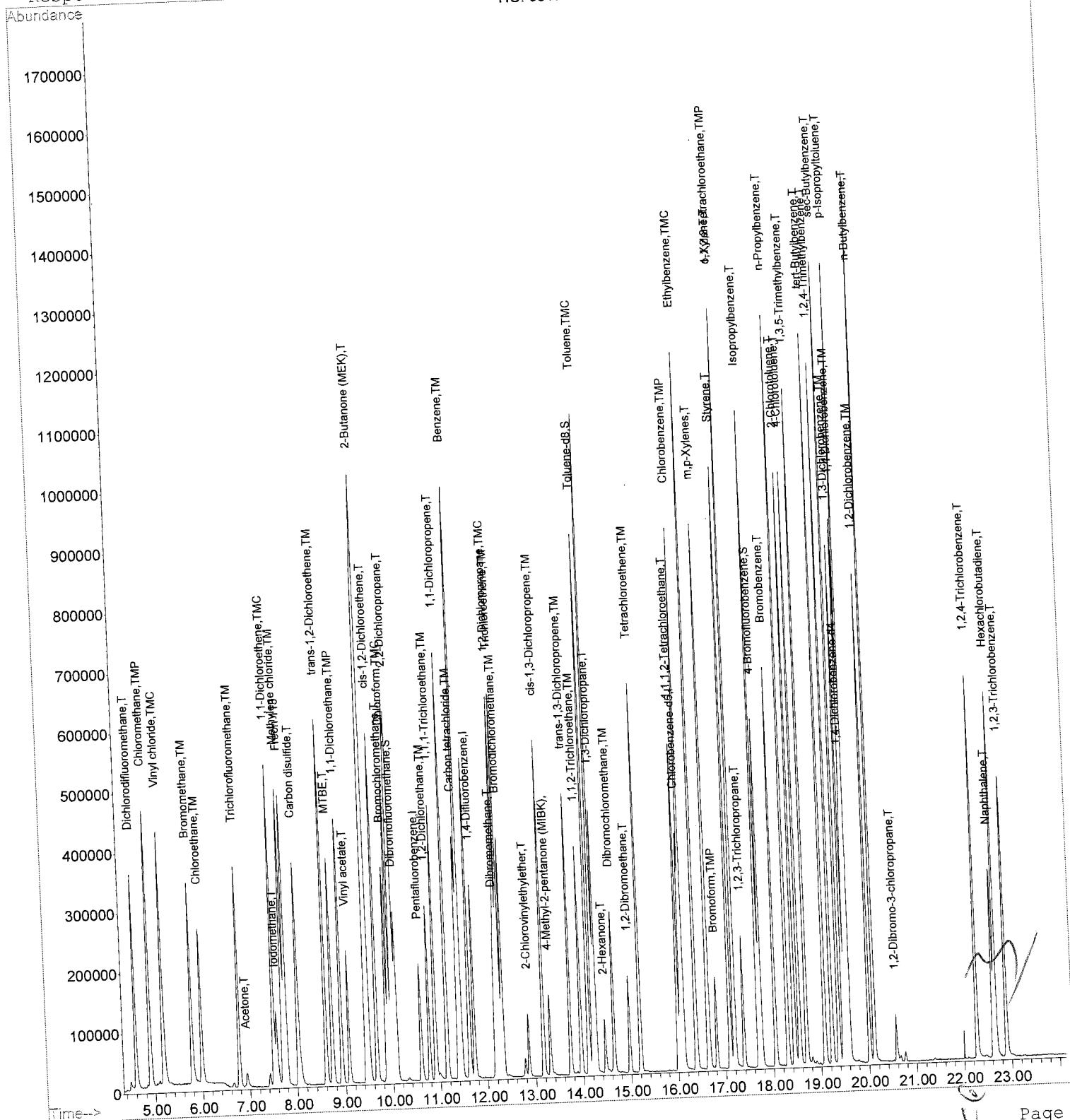
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 (#) = qualifier out of range (m) = manual integration  
 (03171112.D 031711.M Fri Mar 18 08:38:39 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171112.D Vial: 9  
 Acq On : 17 Mar 2011 12:17 pm Operator: LC  
 Sample : 50 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171112.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D      Vial: 10  
Acq On : 17 Mar 2011 12:48 pm      Operator: LC  
Sample : 100 PPB      Inst : GCMS7  
          Multiplr: 1.00

Sample : 100 P11  
Misc :  
MS Integration Params: RTEINT2.P  
Quant Time: Mar 18 8:38 2011

Quant Results File: 031711.RES

Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : C:\HPCHEM\1...\  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration  
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	175118	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	309261	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	251109	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	119502	25.00	ug/L	0.00
System Monitoring Compounds						
23) Dibromofluoromethane	10.09	113	425047	96.46	ug/L	0.00
Spiked Amount	25.000		Recovery	=	385.84%	
39) Toluene-d8	14.12	98	1505447	96.52	ug/L	0.00
Spiked Amount	25.000		Recovery	=	386.08%	
53) 4-Bromofluorobenzene	17.75	95	536695	97.52	ug/L	0.00
Spiked Amount	25.000		Recovery	=	390.08%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	4.60	85	779223	94.19	ug/L	98
3) Chloromethane	4.90	50	1431368	104.65	ug/L	99
4) Vinyl chloride	5.18	62	1228117	100.85	ug/L	100
5) Bromomethane	5.78	94	641424	100.36	ug/L	98
6) Chloroethane	5.98	64	584071	90.47	ug/L	100
7) Trichlorofluoromethane	6.78	101	698452	82.49	ug/L	98
8) Acetone	6.94	43	84316	88.94	ug/L	97
9) Iodomethane	7.58	142	393011	100.00	ug/L	99
10) 1,1-Dichloroethene	7.52	96	450680	91.25	ug/L	99
11) Methylene chloride	7.71	84	530536	91.30	ug/L	99
12) Freon 113	7.78	101	537890	91.98	ug/L	99
13) Carbon disulfide	8.04	76	1652598	94.04	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	514680	94.19	ug/L	96
15) MTBE	8.74	73	859812	92.07	ug/L	99
16) 1,1-Dichloroethane	8.93	63	1054794	92.52	ug/L	99
17) Vinyl acetate	9.08	43	827230	93.42	ug/L	99
18) 2-Butanone (MEK)	9.47	72	27904	99.26	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	527963	93.29	ug/L	94
20) Bromochloromethane	9.87	128	191014	92.23	ug/L	100
21) Chloroform	9.93	83	877382	93.27	ug/L	99
22) 2,2-Dichloropropane	10.04	77	739530	96.96	ug/L	99
24) 1,2-Dichloroethane	10.78	62	540824	94.21	ug/L	98
25) 1,1,1-Trichloroethane	10.91	97	659685	97.66	ug/L	98
27) 1,1-Dichloropropene	11.15	75	764611	96.58	ug/L	100
28) Carbon tetrachloride	11.39	117	547122	100.10	ug/L	99
29) Benzene	11.44	78	2051183	96.91	ug/L	99
30) Dibromomethane	12.17	93	236182	94.32	ug/L	99
31) 1,2-Dichloropropane	12.21	63	573859	97.07	ug/L	99
32) Trichloroethene	12.27	95	518186	97.91	ug/L	100
33) Bromodichloromethane	12.33	83	619726	99.74	ug/L	99
34) 2-Chlorovinylethylether	12.86	63	99299	94.85	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	755768	100.21	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	309174	100.07	ug/L	100
37) trans-1,3-Dichloropropene	13.73	75	581943	99.98	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	272981	97.54	ug/L	98
40) Toluene	14.22	92	1181672	98.20	ug/L	98
42) 1,3-Dichloropropane	14.27	76	562918	99.07	ug/L	98

(#) = qualifier out of range (m) = manual integration  
03171113.D 031711.M Fri Mar 18 08:38:55 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:38 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	203381	107.35	ug/L	# 96
44) Dibromochloromethane	14.65	129	341882	100.06	ug/L	98
45) 1,2-Dibromoethane	14.98	107	294156	103.12	ug/L	99
46) Tetrachloroethene	15.20	166	455622	101.17	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.01	131	371997	100.03	ug/L	98
48) Chlorobenzene	16.12	112	1190206	100.85	ug/L	99
49) Ethylbenzene	16.38	91	2245318	100.99	ug/L	100
50) m,p-Xylenes	16.64	106	773283	99.30	ug/L	100
51) Styrene	17.10	104	1244691	105.39	ug/L	99
52) o-Xylene	17.20	106	750628	99.16	ug/L	97
55) Bromoform	16.82	173	182147	105.27	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.18	83	341207	97.52	ug/L	96
57) 1,2,3-Trichloropropane	17.38	110	75618	99.33	ug/L	100
58) Isopropylbenzene	17.70	105	1844526	100.80	ug/L	99
59) Bromobenzene	18.05	156	429425	101.72	ug/L	100
60) n-Propylbenzene	18.30	91	2615929	100.14	ug/L	99
61) 2-Chlorotoluene	18.45	91	1500663	98.05	ug/L	98
62) 4-Chlorotoluene	18.55	91	1492720	98.39	ug/L	99
63) 1,3,5-Trimethylbenzene	18.70	105	1584063	100.18	ug/L	100
64) tert-Butylbenzene	19.09	119	1344278	99.86	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	1578520	99.31	ug/L	99
66) sec-Butylbenzene	19.39	105	2280043	98.81	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	847018	98.46	ug/L	98
68) 1,4-Dichlorobenzene	19.57	146	846913	97.78	ug/L	100
69) p-Isopropyltoluene	19.61	119	1785874	101.26	ug/L	100
70) 1,2-Dichlorobenzene	20.02	146	731103	97.71	ug/L	99
71) n-Butylbenzene	20.12	91	1981760	100.96	ug/L	92
72) 1,2-Dibromo-3-chloropropan	20.58	157	45883	98.40	ug/L	99
73) 1,2,4-Trichlorobenzene	22.28	180	510699	105.68	ug/L	100
74) Naphthalene	22.63	128	678287	105.85	ug/L	99
75) Hexachlorobutadiene	22.69	225	316227	102.46	ug/L	100
76) 1,2,3-Trichlorobenzene	22.90	180	412634	104.74	ug/L	100

W  
CC

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 (#) = qualifier out of range (m) = manual integration  
 03171113.D 031711.M Fri Mar 18 08:38:56 2011

Page 2

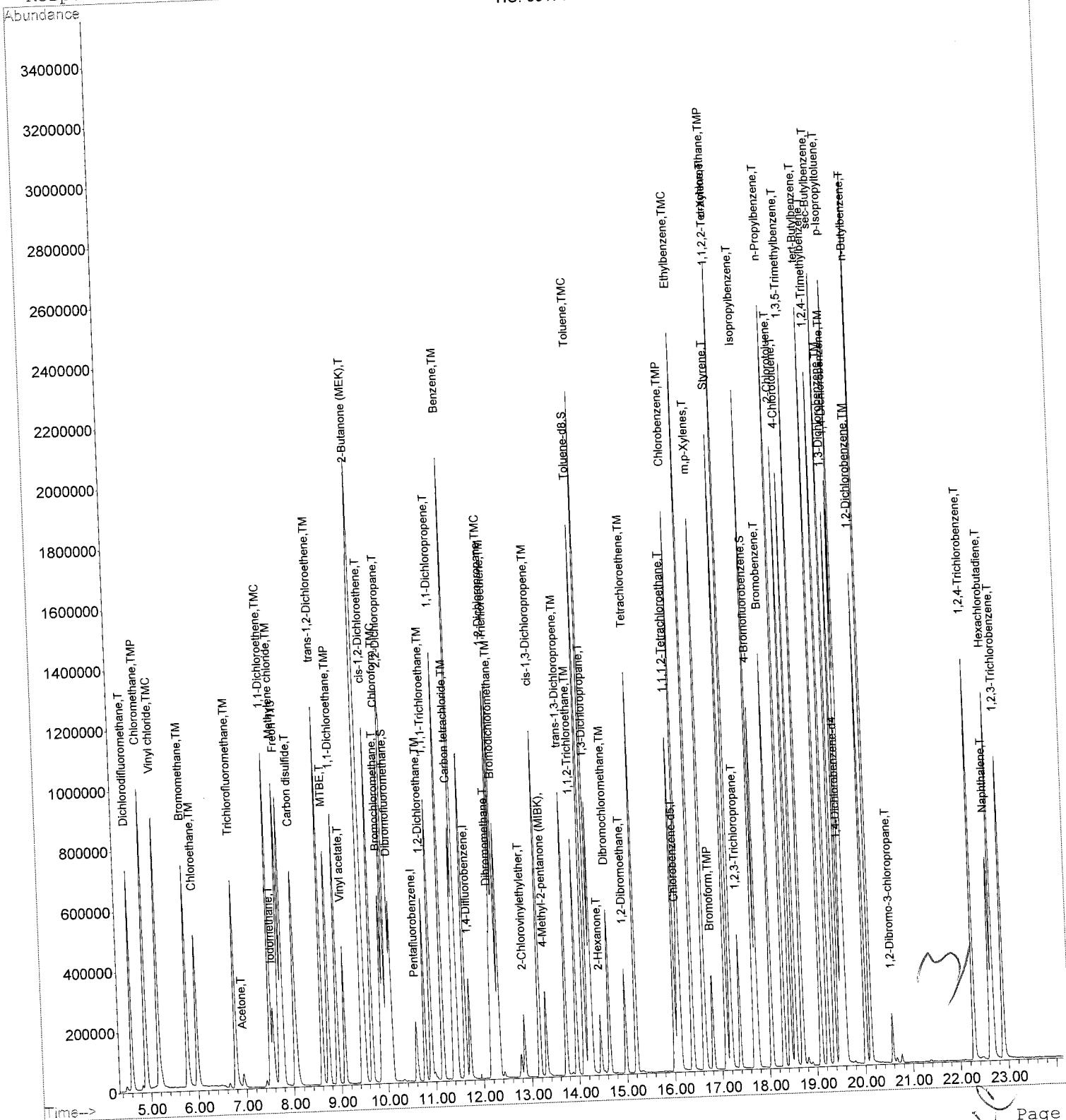
126 of 262

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171113.D Vial: 10  
 Acq On : 17 Mar 2011 12:48 pm Operator: LC  
 Sample : 100 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 18 8:38 2011 Quant Results File: 031711.RES  
 Response via : Initial Calibration

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03171113.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:39 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.61	168	178600	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.73	114	310266	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	255060	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.54	152	136098	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.09	113	839626	186.83	ug/L	0.00
Spiked Amount	25.000		Recovery	= 747.32%		
39) Toluene-d8	14.12	98	3013932	192.60	ug/L	0.00
Spiked Amount	25.000		Recovery	= 770.40%		
53) 4-Bromofluorobenzene	17.76	95	1038923	185.85	ug/L	0.00
Spiked Amount	25.000		Recovery	= 743.40%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.60	85	1487523	176.30	ug/L	98
3) Chloromethane	4.90	50	2913054	208.82	ug/L	99
4) Vinyl chloride	5.16	62	2428967	195.57	ug/L	100
5) Bromomethane	5.78	94	1343422	205.83	ug/L	97
6) Chloroethane	5.98	64	1199344	182.14	ug/L	100
7) Trichlorofluoromethane	6.79	101	1701514	197.03	ug/L	99
8) Acetone	6.94	43	201529	213.75	ug/L	98
9) Iodomethane	7.58	142	794173	198.00	ug/L	98
10) 1,1-Dichloroethene	7.52	96	920511	182.74	ug/L	98
11) Methylene chloride	7.71	84	1063508	179.46	ug/L	97
12) Freon 113	7.78	101	1079115	180.94	ug/L	98
13) Carbon disulfide	8.03	76	3312605	184.83	ug/L	100
14) trans-1,2-Dichloroethene	8.60	96	1036042	185.90	ug/L	97
15) MTBE	8.74	73	1719756	180.56	ug/L	100
16) 1,1-Dichloroethane	8.93	63	2105414	181.08	ug/L	99
17) Vinyl acetate	9.08	43	1660788	183.90	ug/L	99
18) 2-Butanone (MEK)	9.47	72	57153	198.44	ug/L	87
19) cis-1,2-Dichloroethene	9.66	96	1073476	185.99	ug/L	98
20) Bromochloromethane	9.88	128	361702	171.24	ug/L	95
21) Chloroform	9.93	83	1746080	182.00	ug/L	99
22) 2,2-Dichloropropane	10.04	77	1448285	186.19	ug/L	98
24) 1,2-Dichloroethane	10.78	62	1056987	180.53	ug/L	100
25) 1,1,1-Trichloroethane	10.91	97	1325051	192.34	ug/L	98
27) 1,1-Dichloropropene	11.15	75	1539559	193.84	ug/L	99
28) Carbon tetrachloride	11.39	117	1092097	199.16	ug/L	100
29) Benzene	11.45	78	4061777	191.29	ug/L	99
30) Dibromomethane	12.17	93	461244	183.60	ug/L	98
31) 1,2-Dichloropropane	12.21	63	1126863	190.00	ug/L	100
32) Trichloroethene	12.27	95	1022222	192.52	ug/L	98
33) Bromodichloromethane	12.33	83	1217593	195.34	ug/L	100
34) 2-Chlorovinylethylether	12.86	63	174106	166.89	ug/L	100
35) cis-1,3-Dichloropropene	13.17	75	1495017	197.58	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	605768	195.44	ug/L	99
37) trans-1,3-Dichloropropene	13.73	75	1148388	196.66	ug/L	99
38) 1,1,2-Trichloroethane	13.95	83	536251	191.00	ug/L	100
40) Toluene	14.22	92	2368495	196.20	ug/L	98
42) 1,3-Dichloropropane	14.28	76	1107954	191.97	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03171114.D 031711.M Fri Mar 18 08:39:11 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
 Acq On : 17 Mar 2011 1:19 pm Operator: LC  
 Sample : 200 PPB Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 18 8:39 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

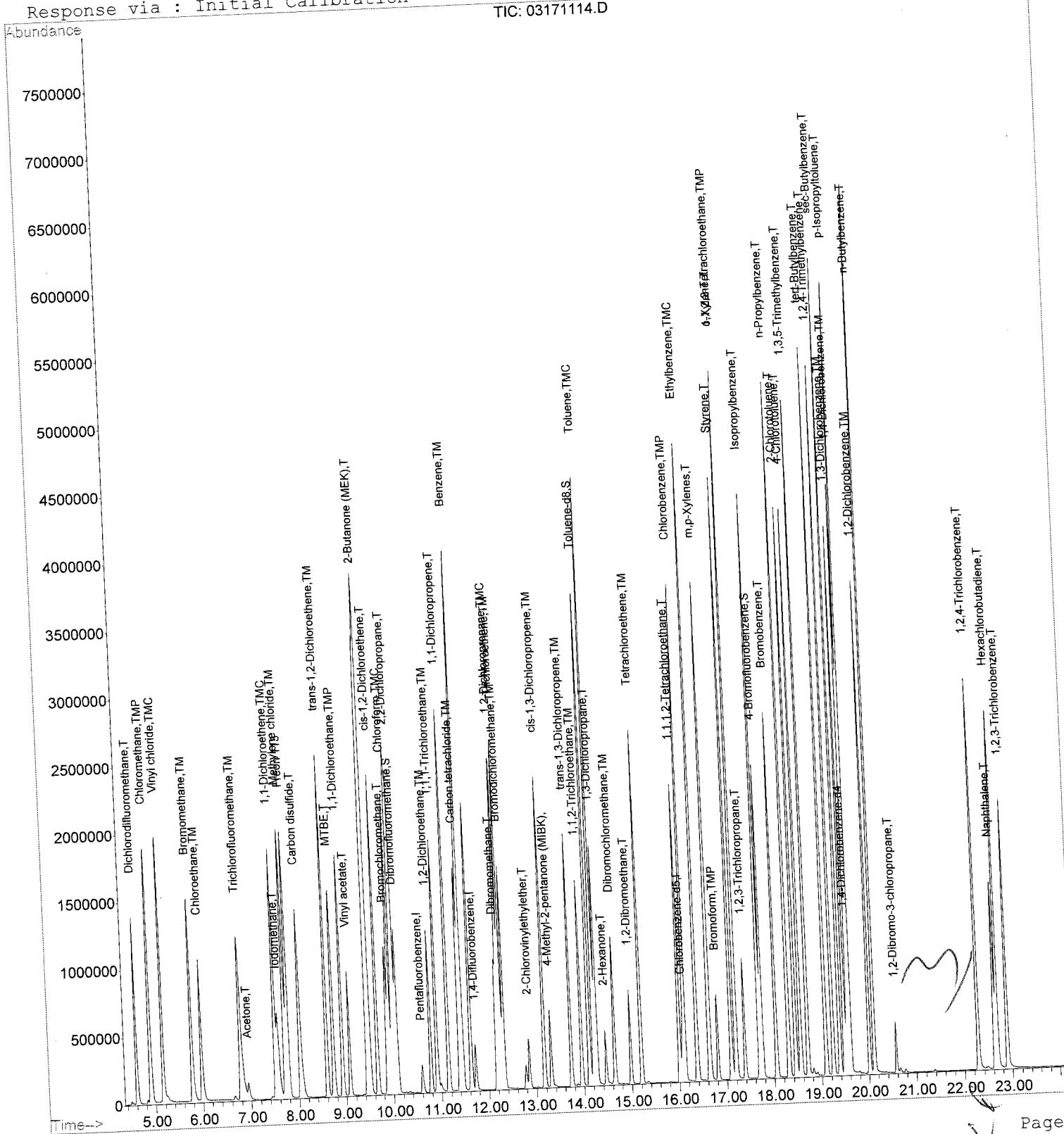
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	396743	206.17	ug/L	# 96
44) Dibromochloromethane	14.65	129	686033	197.67	ug/L	99
45) 1,2-Dibromoethane	14.99	107	575405	198.59	ug/L	99
46) Tetrachloroethene	15.20	166	914229	199.85	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.02	131	755965	200.14	ug/L	96
48) Chlorobenzene	16.13	112	2393108	199.64	ug/L	97
49) Ethylbenzene	16.38	91	4465000	197.71	ug/L	99
50) m,p-Xylenes	16.64	106	1550944	196.07	ug/L	99
51) Styrene	17.10	104	2561762	213.54	ug/L	98
52) o-Xylene	17.20	106	1517247	197.33	ug/L	97
55) Bromoform	16.82	173	364089	184.76	ug/L	97
56) 1,1,2,2-Tetrachloroethane	17.19	83	656346	164.71	ug/L	97
57) 1,2,3-Trichloropropane	17.38	110	155202	179.01	ug/L	99
58) Isopropylbenzene	17.70	105	3655213	175.39	ug/L	98
59) Bromobenzene	18.05	156	865850	180.09	ug/L	99
60) n-Propylbenzene	18.31	91	5305462	178.33	ug/L	99
61) 2-Chlorotoluene	18.45	91	3128722	179.50	ug/L	99
62) 4-Chlorotoluene	18.56	91	3203621	185.40	ug/L	98
63) 1,3,5-Trimethylbenzene	18.70	105	3485140	193.53	ug/L	98
64) tert-Butylbenzene	19.09	119	2997423	195.51	ug/L	99
65) 1,2,4-Trimethylbenzene	19.24	105	3435108	189.77	ug/L	98
66) sec-Butylbenzene	19.39	105	5038432	191.73	ug/L	99
67) 1,3-Dichlorobenzene	19.49	146	1885851	192.49	ug/L	99
68) 1,4-Dichlorobenzene	19.57	146	1902798	192.90	ug/L	99
69) p-Isopropyltoluene	19.61	119	4021709	200.23	ug/L	99
70) 1,2-Dichlorobenzene	20.02	146	1645465	193.10	ug/L	99
71) n-Butylbenzene	20.12	91	4374192	195.66	ug/L	98
72) 1,2-Dibromo-3-chloropropan	20.58	157	102361	192.76	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	1107731	201.28	ug/L	98
74) Naphthalene	22.63	128	1413680	193.70	ug/L	100
75) Hexachlorobutadiene	22.69	225	688401	195.85	ug/L	99
76) 1,2,3-Trichlorobenzene	22.90	180	830638	185.13	ug/L	99

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 (#) = qualifier out of range (m) = manual integration  
 03171114.D 031711.M Fri Mar 18 08:39:11 2011

Page 1

## Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\031711\03171114.D Vial: 12  
Acq On : 17 Mar 2011 1:19 pm Operator: LC  
Sample : 200 PPB Inst : GCMS7  
Misc : Multiplr: 1.00  
MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
Quant Time: Mar 18 8:39 2011  
Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
Title : USEPA Method 8260B  
Time : Mar 17 14:08:36 2011



03171114.D 031711.M

Fri Mar 18 08:39:12 2011

130 of 262



THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL DATA**

METHOD: 8260B

DATE: 03/22/2011

WORK ORDER: PUC1113

**ANALYTICAL DATA REVIEW CHECKLIST**

**SOP PE-VOA-001 R.1**

**GC/MS Volatile Organic Analysis [ Method No. EPA 624 & 8260B ]**

Analysis Date:	03/22/11	Analyst:	LL	
Description		Yes	No	NA <sup>1</sup>
1.	BFB (50 ng or less): Verify meets criteria every 12 hours	/		
2.	Initial Calibration Curve (5 levels)	/		
	- Date of Initial Calibration: 03/17/11.W	/		
	- SPCCs must meet Min. RF	/		
	- CCCs ≤ 30% RPD	/		
	- All other compounds ≤ 15% RSD or use curve	/		
	- Comments:	/		
	- Second source within historical limits	/		
3.	Continuing Calibration Check (every 12 hours)	/		
	- SPCCs must meet Min. RF	/		
	- CCCs ≤ 20% D	/		
	- IS RT ± 30 secs	/		
	- IS area -50% to +100%	/		(1)
	- All CCVs for reported analytes within historical limits	/		
4.	Method Blank	/		
	- Analyze one per batch (≤ 20 samples or 12 hours, whichever is more frequent)	/		
	- All compounds of interest must be < Reporting Limit	/		
5.	Laboratory Control Samples (LCS/LCSD)	/		
	- Must be analyzed per 20 samples/per matrix/per batch	/		
	- LCS/LCSD recoveries within historical limits	/		(2)
	- RPD ≤ 25%	/		
	- Surrogates within historical limits	/		(3)
6.	MS/MSD	/		
	- Must be analyzed per 20 samples/per matrix/per batch	/		
	- MS/MSD recoveries within historical limits	/		
	- RPD ≤ 25%	/		
	- Surrogates within historical limits	/		
7.	Samples	/		
	- Analyzed within 14 days of sampling	/		
	- IS = RT ± 30 secs and area -50% to +100% of Mid-Point of last ICAL or CCV	/		
	- Surrogate recoveries within historical limits	/		
	- pH ≤ 2	/		
	- If pH is not ≤ 2, flag data with P and pH Data Qualifier	/		

Comments:

(1) Acetone - C

(2) Iodomethane - L

(3) Carbon disulfide, 1,1-DCE, Iodomethane, Methylene chloride - RF

NOTE: Batch = 12 hour (from injection of BFB)

Review Signatures:	Analyst: <i>J. A. - RL</i>	Date: 03/22/11
	Reviewer: <i>J. A. - RL</i>	Date: 3/22/11 3/23/11

<sup>1</sup>) NA: Not Applicable

# Injection Log

Directory: C:\HPCHEM\1\GCMS7\DATA\032211

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	03221101.d	1.	TUNE		22 Mar 2011 06:38
2	1	03221102.d	1.	25 PPB CCV		22 Mar 2011 06:58
3	2	03221103.d	1.	-BS1		22 Mar 2011 07:29
4	3	03221104.d	1.	-BSD1		22 Mar 2011 08:00
5	4	03221105.d	1.	-BLK1		22 Mar 2011 08:31
6	5	03221106.d	1.	DNU	TB	22 Mar 2011 09:01
7	6	03221107.d	1.	PUC1114-05	SOURCE	22 Mar 2011 09:32
8	7	03221108.d	1.	PUC0982-02		22 Mar 2011 10:03
9	8	03221109.d	1.	-MS1		22 Mar 2011 10:34
10	9	03221110.d	1.	-MSD1	100X	22 Mar 2011 11:05
11	10	03221111.d	1.	PUC1083-19RE2		22 Mar 2011 11:36
12	12	03221112.d	1.	PUC0982-01		22 Mar 2011 12:07
13	13	03221113.d	1.	PUC0982-03		22 Mar 2011 12:37
14	13	03221114.d	1.	PUC0982-04		22 Mar 2011 13:08
15	16	03221115.d	1.	PUC1002-01		22 Mar 2011 13:39
16	1	03221116.d	1.	PUC1083-20RE1	20X	22 Mar 2011 14:10
17	2	03221117.d	1.	PUC0997-01RE1		22 Mar 2011 14:41
18	3	03221118.d	1.	PUC1004-01		22 Mar 2011 15:12
19	4	03221119.d	1.	PUC1113-01		22 Mar 2011 15:43
20	5	03221120.d	1.	PUC1114-01		22 Mar 2011 16:13
21	6	03221121.d	1.	PUC1114-02		22 Mar 2011 16:44
22	7	03221122.d	1.	PUC1114-03		22 Mar 2011 17:15
23	8	03221123.d	1.	PUC1114-04		22 Mar 2011 17:46
24	9	03221124.d	1.	PUC1117-01		22 Mar 2011 18:16

TestAmerica  
Phoenix

DATE: 03/22/11

ANALYST: LC

# GC/MS 7 DAILY LOG SUMMARY

QC BATCH # (s):

11C0791

SEQUENCE FILE: C:\HPCHEM\1\GCMS7\DATA\ 032211

CALIBRATION METHOD(S): 031711.M1

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	03221101	Tune	2uL	N/A	826eOB	H <sub>2</sub> O	
1	02	25 ppb CCV	1x10mL				Acetone ↑
2	03	11C0791 -BSI					Iodomethane ↑
3	04	1 -BSOI					
4	05	1 -BSKL					
1	06	ANU					Bad Purge -ANU
5	07	PUC1114-05A (TB)		≤2			
6	08	0982-03A		≤2			
7	09	11C0791 -MSI		≤2			
8	10	1 -MSDI		≤2			Benzene Only
9	11	PUC1083-19C RE1	100x100uL	≤2			
10	12	0982-01A	1x10mL	≤2			
12	13	1 -03A		≤2			
13	14	1 -04A		≤2			
16	15	1002-01A		≤2			Possible carryover in a
1	16	1083-20B RE1		≤2			No MTBE
2	17	0997-C13 RE1	20x500uL	≤2			
3	18	1004-01A	1x10mL	≤2			
4	19	1113-C1A		≤2			
5	20	1114-C1A		≤2			
6	21	1 -02A		≤2			
7	22	1 -03A		≤2			
8	23	1 -04A		≤2			
9	24	1117-01A		≤2			

## STANDARD ID NUMBERS

CCV/H2O LCS/H2O SPIKE: PU01537

CALIBRATION STD: 1654

Internal Std: 1655

IS/Surrogate/BFB: 1657 /PU01241

LOT #: N/A

## REQUIRED REVIEWS

ARCHON REVIEWED

By / Date:

LC 03/22/11

SEQUENCE REVIEWED

By / Date:

LC 03/22/11

FINAL REVIEWER / Date:

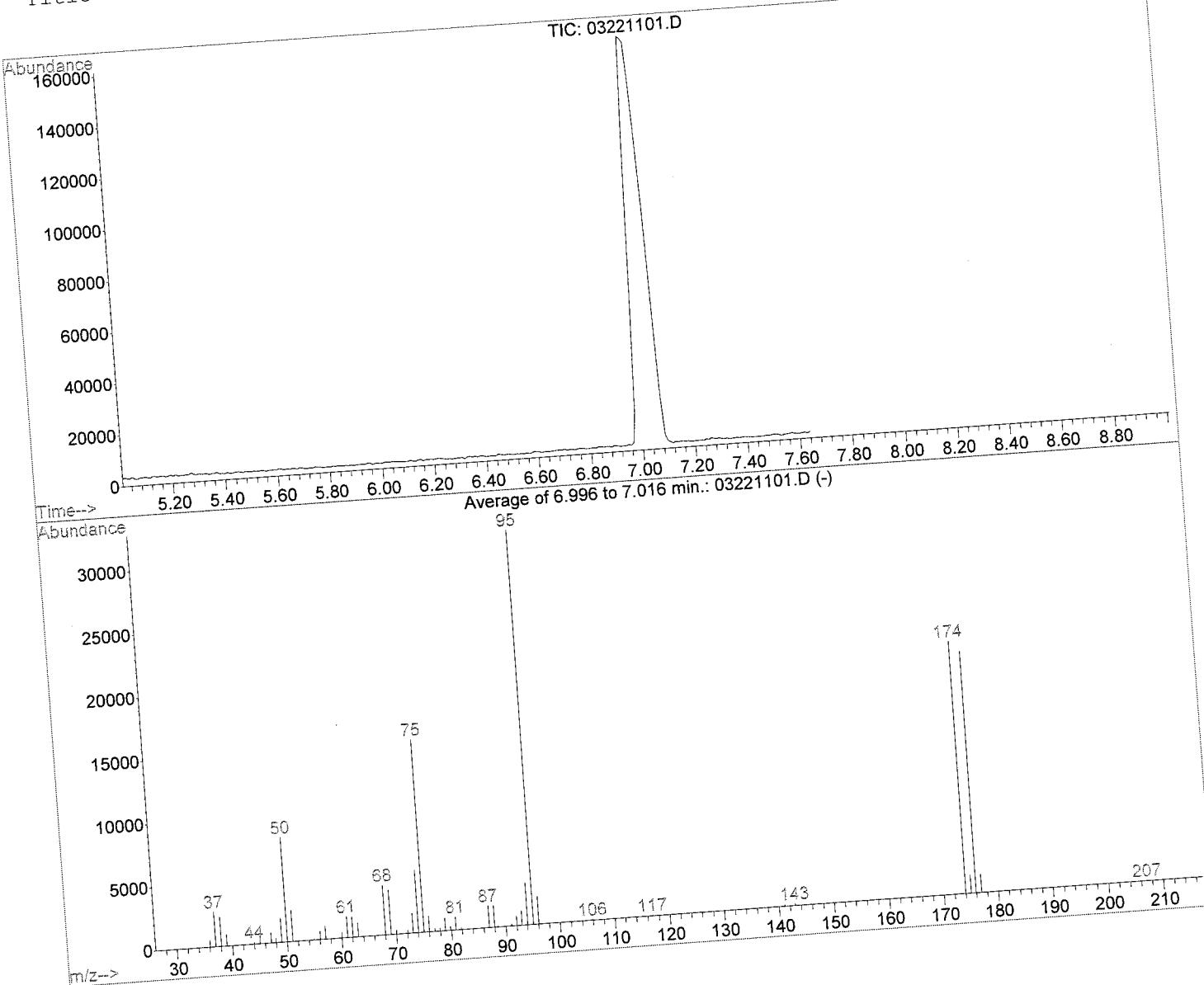
AN/111,111

134 of 262

Method 8260

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221101.D      Vial: 1  
 Acq On : 22 Mar 2011 6:38 am      Operator: LC  
 Sample : TUNE      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B

13/22/11 ✓



Spectrum Information: Average of 6.996 to 7.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.5	8264	PASS
75	95	30	60	48.8	15225	PASS
95	95	100	100	100.0	31216	PASS
96	95	5	9	6.9	2168	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.0	19965	PASS
175	174	5	9	7.1	1423	PASS
176	174	95	101	95.7	19101	PASS
177	176	5	9	7.3	1391	PASS

✓ 03/22/11

## NEW8260-CCV

Data File Name 03221102.D  
 Data File Path C:\HPCHEM\GCMS7\DATA\032211\  
 Operator LC  
 Date Acquired 3/22/2011 6:58  
 Acq. Method File 8260B  
 Sample Name 25 PPB CCV  
 Instrument Name GCMS7

Internal Standard	Target Response	CCV Response	Low	High	T/F	
	Amount	Spike Amount	% REC	Low	High	T/F
Pentafluorobenzene	192989	164363	82181.5	328726	TRUE	
1,4-Difluorobenzene	343848	291205	145602.5	582410	TRUE	
Chlorobenzene-d5	285042	242488	121244	484976	TRUE	
1,4-Dichlorobenzene-d4	125736	112264	56132	224528	TRUE	
Name	Amount	Spike Amount	% REC	Low	High	T/F
Dichlorodifluoromethane	23.37	25.00	93.49	60	150	TRUE
Chloromethane	22.37	25.00	89.47	60	140	TRUE
Vinyl chloride	23.46	25.00	93.83	80	120	TRUE CCC
Bromomethane	19.31	25.00	77.23	70	140	TRUE
Chloroethane	24.38	25.00	97.54	70	130	TRUE
Trichlorofluoromethane	23.44	25.00	93.75	70	150	TRUE
Acetone	45.23	25.00	180.92	10	150	FALSE
Iodomethane	27.94	25.00	111.77	70	140	TRUE
1,1-Dichloroethene	21.11	25.00	84.43	80	120	CCC
Methylene chloride	20.44	25.00	81.75	70	140	TRUE
Freon 113	20.47	25.00	81.89	60	130	TRUE
Carbon disulfide	25.10	25.00	100.41	70	120	TRUE
trans-1,2-Dichloroethene	21.14	25.00	84.56	80	130	TRUE
MTBE	20.61	25.00	82.45	70	125	TRUE
1,1-Dichloroethane	20.66	25.00	82.65	70	150	TRUE
Vinyl acetate	20.71	25.00	82.86	40	150	TRUE
2-Butanone (MEK)	25.26	25.00	101.02	40	120	TRUE
cis-1,2-Dichloroethene	21.01	25.00	84.05	80	120	TRUE
Bromochloromethane	21.64	25.00	86.55	80	120	CCC
Chloroform	20.72	25.00	82.89	80	130	TRUE
2,2-Dichloropropane	22.07	25.00	88.29	80	120	TRUE
Dibromofluoromethane	22.65	25.00	90.61	80	120	TRUE
1,2-Dichloroethane	20.85	25.00	83.41	75	130	TRUE
1,1,1-Trichloroethane	21.92	25.00	87.68	80	120	TRUE
1,1-Dichloropropene	21.61	25.00	86.44	80	130	TRUE
Carbon tetrachloride	22.56	25.00	90.25	80	120	TRUE
Benzene	21.00	25.00	84.00	80	120	TRUE
Dibromomethane	20.50	25.00	82.01	80	120	CCC
1,2-Dichloropropane	20.49	25.00	81.97	80	120	TRUE
Trichloroethene	21.12	25.00	84.47	80	120	TRUE
Bromodichloromethane	21.21	25.00	84.84	80	135	TRUE
2-Chlorovinylethylether	26.56	25.00	106.23	70	120	TRUE
cis-1,3-Dichloropropene	20.82	25.00	83.27	80	130	TRUE
4-Methyl-2-pentanone (MIB)	21.33	25.00	85.31	60	125	TRUE
trans-1,3-Dichloropropene	20.73	25.00	82.91	80		

1,1,2-Trichloroethane	20.80	25.00	83.20	80	120	TRUE
Toluene-d8	<b>22.38</b>	<b>25.00</b>	<b>89.54</b>	<b>80</b>	<b>120</b>	TRUE CCC
Toluene	20.95	25.00	83.80	80	120	TRUE
1,3-Dichloropropane	20.27	25.00	81.08	80	150	TRUE
2-Hexanone	22.33	25.00	89.31	20	120	TRUE
Dibromochloromethane	20.46	25.00	81.83	80	120	TRUE
1,2-Dibromoethane	21.17	25.00	84.67	80	130	TRUE
Tetrachloroethene	20.98	25.00	83.92	70	120	TRUE
1,1,1,2-Tetrachloroethane	20.93	25.00	83.72	80	120	TRUE
Chlorobenzene	20.83	25.00	83.31	80	120	TRUE CCC
Ethylbenzene	21.08	25.00	84.32	80	140	TRUE
m,p-Xylenes	21.49	25.00	85.97	60	120	TRUE
Styrene	22.26	25.00	89.03	80	120	TRUE
o-Xylene	20.67	25.00	82.70	80	120	TRUE
<b>4-Bromofluorobenzene</b>	<b>21.79</b>	<b>25.00</b>	<b>87.14</b>	<b>80</b>	<b>120</b>	TRUE
Bromoform	22.32	25.00	89.29	80	120	TRUE
1,1,2,2-Tetrachloroethane	20.56	25.00	82.23	80	130	TRUE
1,2,3-Trichloropropane	21.39	25.00	85.56	70	130	TRUE
Isopropylbenzene	23.16	25.00	92.65	80	120	TRUE
Bromobenzene	22.35	25.00	89.40	80	130	TRUE
n-Propylbenzene	23.03	25.00	92.12	75	120	TRUE
2-Chlorotoluene	22.50	25.00	90.01	80	120	TRUE
4-Chlorotoluene	22.55	25.00	90.20	80	130	TRUE
1,3,5-Trimethylbenzene	23.19	25.00	92.78	80	120	TRUE
tert-Butylbenzene	23.20	25.00	92.81	80	120	TRUE
1,2,4-Trimethylbenzene	23.03	25.00	92.12	80	125	TRUE
sec-Butylbenzene	22.99	25.00	91.98	80	120	TRUE
1,3-Dichlorobenzene	22.27	25.00	89.10	80	120	TRUE
1,4-Dichlorobenzene	21.99	25.00	87.95	80	130	TRUE
p-Isopropyltoluene	23.62	25.00	94.48	80	120	TRUE
1,2-Dichlorobenzene	21.32	25.00	85.27	80	130	TRUE
n-Butylbenzene	23.30	25.00	93.20	80	150	TRUE
1,2-Dibromo-3-chloropropane	19.47	25.00	77.90	50	150	TRUE
1,2,4-Trichlorobenzene	22.42	25.00	89.67	50	150	TRUE
Naphthalene	20.53	25.00	82.11	40	150	TRUE
Hexachlorobutadiene	23.71	25.00	94.83	40	140	TRUE
1,2,3-Trichlorobenzene	22.25	25.00	89.01	60		

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D  
 Acq On : 22 Mar 2011 6:58 am  
 Sample : 25 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:22 2011

Vial: 1  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.59	168	192989	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	343848	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	285042	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	125736	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	110000	22.65	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.60%		
39) Toluene-d8	14.10	98	388191	22.38	ug/L	-0.01
Spiked Amount 25.000			Recovery =	89.52%		
53) 4-Bromofluorobenzene	17.75	95	136097	21.79	ug/L	0.00
Spiked Amount 25.000			Recovery =	87.16%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	213089	23.37	ug/L	98
3) Chloromethane	4.89	50	337179	22.37	ug/L	99
4) Vinyl chloride	5.18	62	314832	23.46	ug/L	98
5) Bromomethane	5.78	94	134516	19.31	ug/L	98
6) Chloroethane	5.98	64	173501	24.38	ug/L	100
7) Trichlorofluoromethane	6.77	101	218697	23.44	ug/L	98
8) Acetone	6.92	43	49192	45.23	ug/L	100
9) Iodomethane	7.57	142	120625	27.94	ug/L	100
10) 1,1-Dichloroethene	7.51	96	114889	21.11	ug/L	99
11) Methylene chloride	7.77	101	130878	20.44	ug/L	99
12) Freon 113	7.70	84	131933	20.47	ug/L	100
13) Carbon disulfide	8.02	76	486157	25.10	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	127312	21.14	ug/L	96
15) MTBE	8.73	73	212128	20.61	ug/L	100
16) 1,1-Dichloroethane	8.92	63	259588	20.66	ug/L	99
17) Vinyl acetate	9.08	43	202136	20.71	ug/L	100
18) 2-Butanone (MEK)	9.46	72	7617	25.26	ug/L	59
19) cis-1,2-Dichloroethene	9.65	96	131050	21.01	ug/L	98
20) Bromochloromethane	9.86	128	49383	21.64	ug/L	98
21) Chloroform	9.92	83	214825	20.72	ug/L	99
22) 2,2-Dichloropropane	10.03	77	185522	22.07	ug/L	97
24) 1,2-Dichloroethane	10.77	62	131923	20.85	ug/L	99
25) 1,1,1-Trichloroethane	10.90	97	163179	21.92	ug/L	99
27) 1,1-Dichloropropene	11.14	75	190209	21.61	ug/L	98
28) Carbon tetrachloride	11.38	117	137119	22.56	ug/L	100
29) Benzene	11.44	78	494195	21.00	ug/L	100
30) Dibromomethane	12.16	93	57078	20.50	ug/L	99
31) 1,2-Dichloropropane	12.20	63	134693	20.49	ug/L	99
32) Trichloroethene	12.25	95	124260	21.12	ug/L	99
33) Bromodichloromethane	12.32	83	146515	21.21	ug/L	100
34) 2-Chlorovinylethylether	12.85	63	32154	26.56	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	174563	20.82	ug/L	98
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	73258	21.33	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	134145	20.73	ug/L	98
38) 1,1,2-Trichloroethane	13.94	83	64723	20.80	ug/L	100
40) Toluene	14.21	92	280289	20.95	ug/L	97
42) 1,3-Dichloropropane	14.27	76	130749	20.27	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03221102.D 031711.M Tue Mar 22 12:23:04 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D  
 Acq On : 22 Mar 2011 6:58 am  
 Sample : 25 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:22 2011

Vial: 1  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	48016	22.33	ug/L	# 95
44) Dibromochloromethane	14.64	129	79348	20.46	ug/L	99
45) 1,2-Dibromoethane	14.97	107	68544	21.17	ug/L	98
46) Tetrachloroethene	15.19	166	107256	20.98	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.01	131	88350	20.93	ug/L	95
48) Chlorobenzene	16.12	112	278995	20.83	ug/L	99
49) Ethylbenzene	16.37	91	531989	21.08	ug/L	100
50) m,p-Xylenes	16.63	106	189996	21.49	ug/L	98
51) Styrene	17.09	104	298392	22.26	ug/L	97
52) o-Xylene	17.19	106	177651	20.67	ug/L	100
55) Bromoform	16.81	173	40639	22.32	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.18	83	75679	20.56	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	17133	21.39	ug/L	99
58) Isopropylbenzene	17.69	105	445960	23.16	ug/L	99
59) Bromobenzene	18.04	156	99274	22.35	ug/L	100
60) n-Propylbenzene	18.29	91	632971	23.03	ug/L	100
61) 2-Chlorotoluene	18.44	91	362356	22.50	ug/L	99
62) 4-Chlorotoluene	18.54	91	359995	22.55	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	385893	23.19	ug/L	99
64) tert-Butylbenzene	19.08	119	328649	23.20	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	385130	23.03	ug/L	99
66) sec-Butylbenzene	19.38	105	558264	22.99	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	201609	22.27	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	200379	21.99	ug/L	99
69) p-Isopropyltoluene	19.60	119	438302	23.62	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	167826	21.32	ug/L	98
71) n-Butylbenzene	20.11	91	481225	23.30	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.58	157	9554	19.47	ug/L	84
73) 1,2,4-Trichlorobenzene	22.28	180	113985	22.42	ug/L	100
74) Naphthalene	22.62	128	138409	20.53	ug/L	100
75) Hexachlorobutadiene	22.68	225	76986	23.71	ug/L	97
76) 1,2,3-Trichlorobenzene	22.89	180	92238	22.25	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03221102.D 031711.M Tue Mar 22 12:23:04 2011

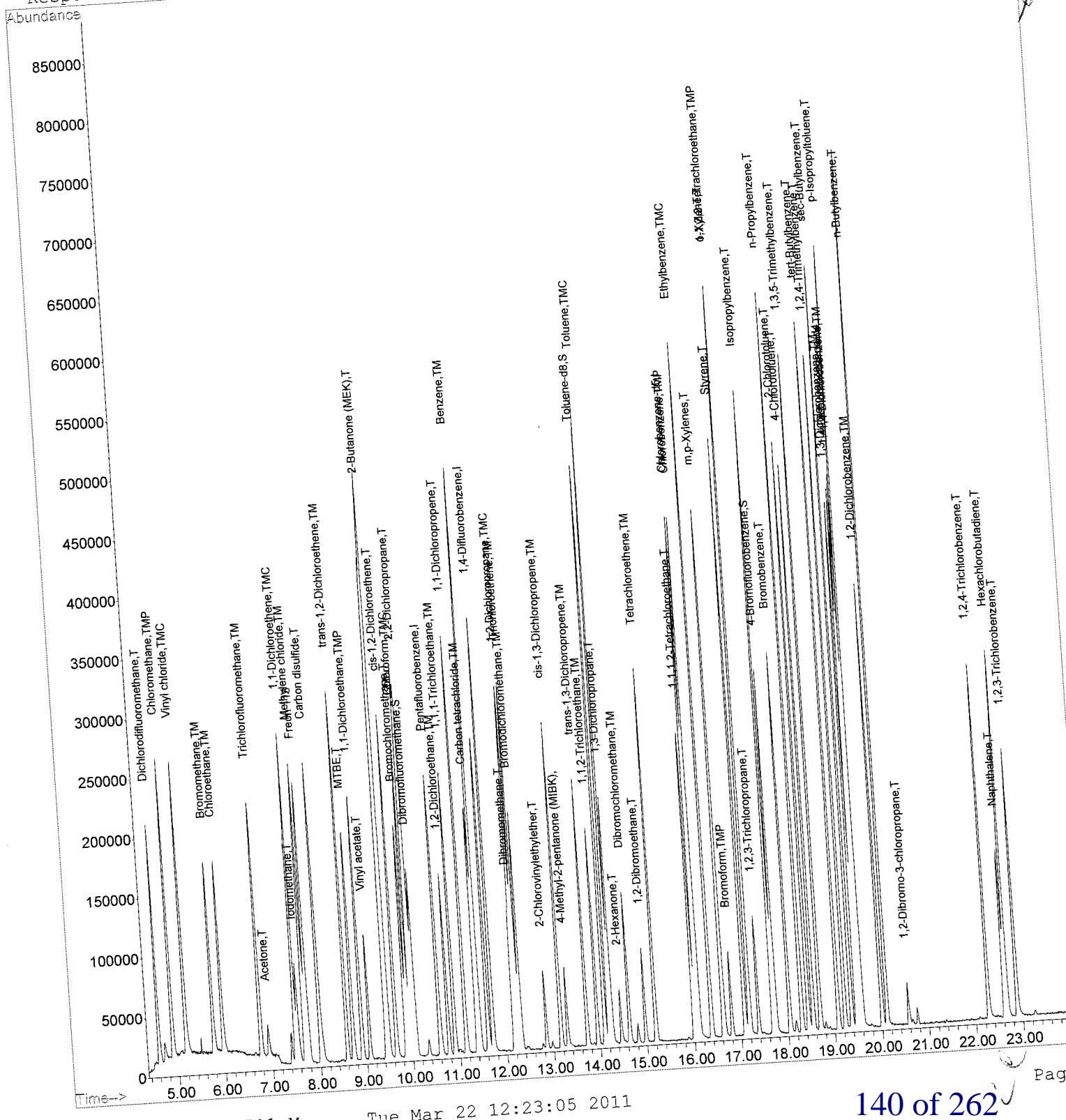
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D  
 Acq On : 22 Mar 2011 6:58 am  
 Sample : 25 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:22 2011  
 Quant Results File: 031711.RES

Vial: 1  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221102.D



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D  
 Acq On : 22 Mar 2011 6:58 am  
 Sample : 25 PPB CCV  
 Misc :  
 MS Integration Params: RTEINT2.P

Vial: 1  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration  
 Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

✓ 3/22/11

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	117	-0.01
2 T	Dichlorodifluoromethane	1.181	1.104	6.5	107	0.00
3 TMP	Chloromethane	1.953	1.747	10.5	105	0.00
4 TMC	Vinyl chloride	1.739	1.631	6.2	111	0.00
5 TM	Bromomethane	0.813	0.697	14.3	95	0.00
6 TM	Chloroethane	0.922	0.899	2.5	116	0.00
7 TM	Trichlorofluoromethane	1.209	1.133	6.3	102	0.00
8 T	Acetone	0.194	0.255	-31.4#	190	-0.01
9 T	Iodomethane	0.531	0.625	-17.7	123	0.00
10 TMC	1,1-Dichloroethene	0.705	0.595	15.6	103	0.00
11 TM	Methylene chloride	0.830	0.678	18.3	99	0.00
12	Freon 113	0.835	0.684	18.1	99	0.00
13 T	Carbon disulfide	2.509	2.519	-0.4	121	0.00
14 TM	trans-1,2-Dichloroethene	0.780	0.660	15.4	100	0.00
15 T	MTBE	1.333	1.099	17.6	99	0.00
16 TMP	1,1-Dichloroethane	1.628	1.345	17.4	98	0.00
17 T	Vinyl acetate	1.264	1.047	17.2	100	0.00
18 T	2-Butanone (MEK)	0.036	0.039#	-8.3	110	-0.01
19 T	cis-1,2-Dichloroethene	0.808	0.679	16.0	100	0.00
20 T	Bromochloromethane	0.296	0.256	13.5	104	0.00
21 TMC	Chloroform	1.343	1.113	17.1	98	0.00
22 T	2,2-Dichloropropane	1.089	0.961	11.8	103	0.00
23 S	Dibromofluoromethane	0.629	0.570	9.4	106	0.00
24 TM	1,2-Dichloroethane	0.820	0.684	16.6	97	-0.01
25 TM	1,1,1-Trichloroethane	0.964	0.846	12.2	101	0.00
26 I	1,4-Difluorobenzene	1.000	1.000	0.0	118	0.00
27 T	1,1-Dichloropropene	0.640	0.553	13.6	99	0.00
28 TM	Carbon tetrachloride	0.442	0.399	9.7	103	0.00
29 TM	Benzene	1.711	1.437	16.0	101	0.00
30 T	Dibromomethane	0.202	0.166	17.8	98	0.00
31 TMC	1,2-Dichloropropane	0.478	0.392	18.0	96	0.00
32 TM	Trichloroethene	0.428	0.361	15.7	100	-0.01
33 TM	Bromodichloromethane	0.502	0.426	15.1	97	0.00
34 T	2-Chlorovinylidylether	0.101	0.094#	6.9	111	0.00
35 TM	cis-1,3-Dichloropropene	0.610	0.508	16.7	95	0.00
36	cis-1,3-Dichloropropene (MIBK)	0.250	0.213	14.8	102	0.00
37 TM	4-Methyl-2-pentanone	0.471	0.390	17.2	95	0.00
38 TM	trans-1,3-Dichloropropene	0.226	0.188	16.8	98	0.00
39 S	1,1,2-Trichloroethane	1.261	1.129	10.5	108	-0.01
40 TMC	Toluene-d8	0.973	0.815	16.2	99	0.00
41 I	Toluene	1.000	1.000	0.0	118	0.00
42 T	Chlorobenzene-d5	0.566	0.459	18.9	93	0.00
43 T	1,3-Dichloropropane	0.189	0.168	11.1	108	0.00
44 TM	2-Hexanone	0.340	0.278	18.2	97	0.00
45 T	Dibromochloromethane	0.284	0.240	15.5	97	0.00
46 TM	1,2-Dibromoethane	0.448	0.376	16.1	98	-0.01
47 T	Tetrachloroethene	0.370	0.310	16.2	101	0.00
48 TMP	1,1,1,2-Tetrachloroethane	1.175	0.979	16.7	98	0.00

(#) = Out of Range  
 03221102.D 031711.M

Tue Mar 22 12:23:08 2011

✓ 3/22/11  
 ✓ 3/23/11  
 141 of 262

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221102.D      Vial: 1  
 Acq On : 22 Mar 2011 6:58 am      Operator: LC  
 Sample : 25 PPB CCV      Inst : GCMS7  
 Misc :      Multipllr: 1.00  
 MS Integration Params: RTEINT2.P

MS Integration Params: RTEINT2.P

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area	% Dev (min)
49	TMC	Ethylbenzene	2.214	1.866	15.7	99	0.00
50	T	m,p-Xylenes	0.775	0.667	13.9	102	0.00
51	T	Styrene	1.176	1.047	11.0	101	0.00
52	T	o-Xylene	0.754	0.623	17.4	100	0.00
53	S	4-Bromofluorobenzene	0.548	0.477	13.0	106	0.00
54		1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00
55	TMP	Bromoform	0.362	0.323	10.8	96	0.00
56	TMP	1,1,2,2-Tetrachloroethane	0.732	0.602	17.8	92	0.00
57	T	1,2,3-Trichloropropane	0.159	0.136	14.5	91	0.00
58	T	Isopropylbenzene	3.828	3.547	7.3	100	0.00
59	T	Bromobenzene	0.883	0.790	10.5	94	0.00
60	T	n-Propylbenzene	5.465	5.034	7.9	100	0.00
61	T	n-Propylbenzene	3.202	2.882	10.0	99	0.00
61	T	2-Chlorotoluene	3.174	2.863	9.8	98	0.00
62	T	2-Chlorotoluene	3.308	3.069	7.2	101	0.00
63	T	4-Chlorotoluene	2.816	2.614	7.2	101	0.00
64	T	1,3,5-Trimethylbenzene	3.325	3.063	7.9	101	0.00
65	T	1,2,4-Trimethylbenzene	4.827	4.440	8.0	100	0.00
66	T	sec-Butylbenzene	1.800	1.603	10.9	98	0.00
67	TM	1,3-Dichlorobenzene	1.812	1.594	12.0	99	0.00
68	TM	1,4-Dichlorobenzene	3.690	3.486	5.5	101	0.00
69	T	p-Isopropyltoluene	1.565	1.335	14.7	94	0.00
70	TM	1,2-Dichlorobenzene	4.107	3.827	6.8	99	0.00
71	T	n-Butylbenzene	0.098	0.076#	22.4	84	0.00
72	T	1,2-Dibromo-3-chloropropane	1.011	0.907	10.3	93	0.00
73	T	1,2,4-Trichlorobenzene	1.341	1.101	17.9	84	0.00
74	T	Naphthalene	0.646	0.612	5.3	100	0.00
75	T	Hexachlorobutadiene	0.824	0.734	10.9	91	0.00
76	T	1,2,3-Trichlorobenzene					

(#) = Out of Range  
 03221102.D 031711.M

SPCC's out = 0 CCC's out = 0  
 Tue Mar 22 12:23:09 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D  
 Acq On : 22 Mar 2011 7:29 am  
 Sample : -BS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011

Vial: 2  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/22/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	191208	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	335903	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	277118	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	131814	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	111828	23.24	ug/L	0.00
Spiked Amount 25.000			Recovery =	92.96%		
39) Toluene-d8	14.11	98	382232	22.56	ug/L	0.00
Spiked Amount 25.000			Recovery =	90.24%		
53) 4-Bromofluorobenzene	17.74	95	134823	22.20	ug/L	0.00
Spiked Amount 25.000			Recovery =	88.80%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	185855	20.57	ug/L	99
3) Chloromethane	4.89	50	261130	17.48	ug/L	98
4) Vinyl chloride	5.18	62	278784	20.97	ug/L	97
5) Bromomethane	5.77	94	143775	20.81	ug/L	97
6) Chloroethane	5.98	64	150093	21.29	ug/L	98
7) Trichlorofluoromethane	6.77	101	219743	23.77	ug/L	99
8) Acetone	6.93	43	34192	30.55	ug/L	98
9) Iodomethane	7.56	142	163900	38.27	ug/L	97
10) 1,1-Dichloroethene	7.50	96	138487	25.68	ug/L	98
11) Methylene chloride	7.70	84	156896	24.73	ug/L	99
12) Freon 113	7.77	101	156619	24.53	ug/L	99
13) Carbon disulfide	8.02	76	556252	28.99	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	125918	21.10	ug/L	99
15) MTBE	8.73	73	204242	20.03	ug/L	100
16) 1,1-Dichloroethane	8.91	63	255867	20.55	ug/L	99
17) Vinyl acetate	9.07	43	254923	26.37	ug/L	39
18) 2-Butanone (MEK)	9.46	72	7665	25.64	ug/L	98
19) cis-1,2-Dichloroethene	9.65	96	122782	19.87	ug/L	98
20) Bromochloromethane	9.87	128	47331	20.93	ug/L	99
21) Chloroform	9.93	83	207118	20.17	ug/L	99
22) 2,2-Dichloropropane	10.03	77	175307	21.05	ug/L	98
24) 1,2-Dichloroethane	10.77	62	130161	20.76	ug/L	100
25) 1,1,1-Trichloroethane	10.90	97	154419	20.94	ug/L	99
27) 1,1-Dichloropropene	11.14	75	180517	20.99	ug/L	100
28) Carbon tetrachloride	11.38	117	127362	21.45	ug/L	100
29) Benzene	11.43	78	463066	20.14	ug/L	97
30) Dibromomethane	12.16	93	57299	21.07	ug/L	100
31) 1,2-Dichloropropane	12.21	63	133105	20.73	ug/L	99
32) Trichloroethene	12.26	95	119163	20.73	ug/L	99
33) Bromodichloromethane	12.32	83	143092	21.20	ug/L	99
34) 2-Chlorovinylethylether	12.85	63	38405	32.81	ug/L	100
35) cis-1,3-Dichloropropene	13.16	75	175276	21.40	ug/L	100
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	78742	23.47	ug/L	98
37) trans-1,3-Dichloropropene	13.72	75	141343	22.36	ug/L	99
38) 1,1,2-Trichloroethane	13.94	83	64276	21.15	ug/L	99
40) Toluene	14.20	92	264288	20.22	ug/L	99
42) 1,3-Dichloropropane	14.26	76	130902	20.88	ug/L	97

(#) = qualifier out of range (m) = manual integration  
 03221103.D 031711.M Tue Mar 22 12:23:46 2011

10/03/2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D  
 Acq On : 22 Mar 2011 7:29 am  
 Sample : -BS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011  
 Quant Results File: 031711.RES  
 Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Vial: 2  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	51395	24.58	ug/L	96
44) Dibromochloromethane	14.64	129	81791	21.69	ug/L	99
45) 1,2-Dibromoethane	14.97	107	67085	21.31	ug/L	99
46) Tetrachloroethene	15.20	166	103121	20.75	ug/L	100
47) 1,1,1,2-Tetrachloroethane	16.00	131	85361	20.80	ug/L	97
48) Chlorobenzene	16.11	112	269306	20.68	ug/L	99
49) Ethylbenzene	16.37	91	507210	20.67	ug/L	100
50) m,p-Xylenes	16.63	106	178224	20.74	ug/L	100
51) Styrene	17.08	104	281281	21.58	ug/L	97
52) o-Xylene	17.19	106	169756	20.32	ug/L	99
55) Bromoform	16.81	173	42245	22.13	ug/L	99
56) 1,1,2,2-Tetrachloroethane	17.18	83	82776	21.45	ug/L	100
57) 1,2,3-Trichloropropane	17.38	110	18263	21.75	ug/L	99
58) Isopropylbenzene	17.68	105	462333	22.91	ug/L	100
59) Bromobenzene	18.05	156	98403	21.13	ug/L	100
60) n-Propylbenzene	18.29	91	627134	21.76	ug/L	98
61) 2-Chlorotoluene	18.44	91	344737	20.42	ug/L	99
62) 4-Chlorotoluene	18.55	91	357127	21.34	ug/L	100
63) 1,3,5-Trimethylbenzene	18.70	105	373785	21.43	ug/L	99
64) tert-Butylbenzene	19.09	119	312181	21.02	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	384657	21.94	ug/L	99
66) sec-Butylbenzene	19.37	105	534899	21.02	ug/L	99
67) 1,3-Dichlorobenzene	19.47	146	198414	20.91	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	199251	20.86	ug/L	99
69) p-Isopropyltoluene	19.60	119	426160	21.91	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	171672	20.80	ug/L	99
71) n-Butylbenzene	20.11	91	477436	22.05	ug/L	99
72) 1,2-Dibromo-3-chloropropan	20.57	157	11019	21.42	ug/L	92
73) 1,2,4-Trichlorobenzene	22.28	180	126767	23.78	ug/L	100
74) Naphthalene	22.62	128	169482	23.98	ug/L	100
75) Hexachlorobutadiene	22.68	225	74923	22.01	ug/L	99
76) 1,2,3-Trichlorobenzene	22.89	180	103262	23.76	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03221103.D 031711.M Tue Mar 22 12:23:47 2011

Quantitation Report

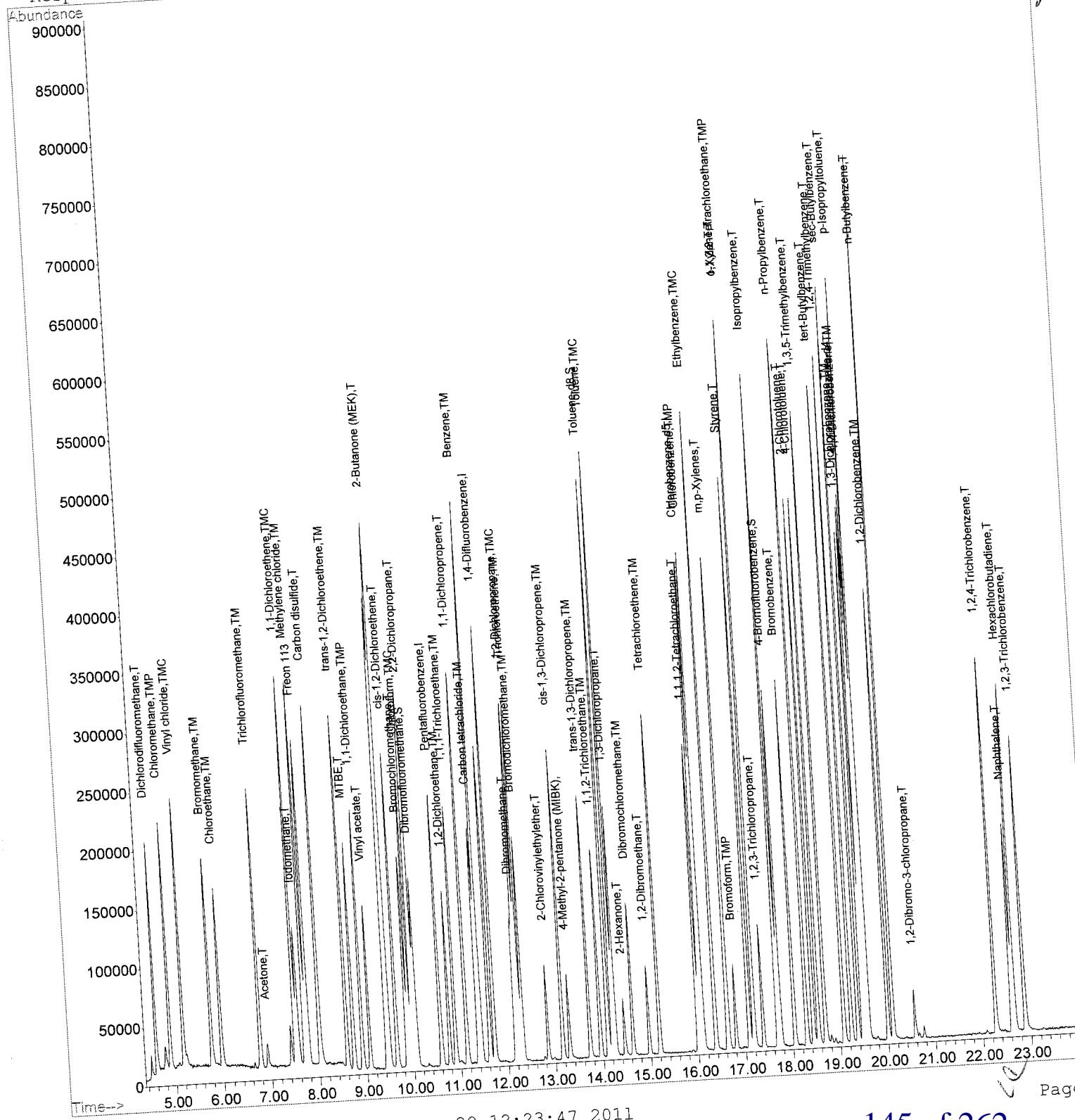
Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221103.D  
 Acq On : 22 Mar 2011 7:29 am  
 Sample : -BS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011

Vial: 2  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221103.D



## Quantitation Report (OT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D  
 Acq On : 22 Mar 2011 8:00 am  
 Sample : -BSD1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:23 2011

Vial: 3  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

✓ 3/22/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	193281	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	333677	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	278307	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127803	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	111706	22.97	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.88%		
39) Toluene-d8	14.11	98	377394	22.43	ug/L	0.00
Spiked Amount 25.000			Recovery =	89.72%		
53) 4-Bromofluorobenzene	17.74	95	135668	22.24	ug/L	0.00
Spiked Amount 25.000			Recovery =	88.96%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	175198	19.19	ug/L	97
3) Chloromethane	4.89	50	249111	16.50	ug/L	99
4) Vinyl chloride	5.17	62	258846	19.26	ug/L	100
5) Bromomethane	5.77	94	127292	18.26	ug/L	100
6) Chloroethane	5.97	64	141552	19.86	ug/L	96
7) Trichlorofluoromethane	6.77	101	211288	22.61	ug/L	99
8) Acetone	6.93	43	32363	28.36	ug/L	100
9) Iodomethane	7.56	142	107319	24.84	ug/L	100
10) 1,1-Dichloroethene	7.51	96	109072	20.01	ug/L	99
11) Methylene chloride	7.70	84	127679	19.91	ug/L	96
12) Freon 113	7.77	101	124317	19.26	ug/L	98
13) Carbon disulfide	8.02	76	455884	23.50	ug/L	100
14) trans-1,2-Dichloroethene	8.59	96	122191	20.26	ug/L	99
15) MTBE	8.73	73	207196	20.10	ug/L	100
16) 1,1-Dichloroethane	8.91	63	251637	20.00	ug/L	100
17) Vinyl acetate	9.07	43	255285	26.12	ug/L	100
18) 2-Butanone (MEK)	9.47	72	7029	23.34	ug/L	54
19) cis-1,2-Dichloroethene	9.65	96	121582	19.46	ug/L	98
20) Bromochloromethane	9.86	128	47600	20.82	ug/L	96
21) Chloroform	9.92	83	203645	19.61	ug/L	100
22) 2,2-Dichloropropane	10.03	77	171151	20.33	ug/L	99
24) 1,2-Dichloroethane	10.77	62	127678	20.15	ug/L	99
25) 1,1,1-Trichloroethane	10.90	97	154276	20.69	ug/L	98
27) 1,1-Dichloropropene	11.14	75	178405	20.89	ug/L	100
28) Carbon tetrachloride	11.38	117	125187	21.23	ug/L	99
29) Benzene	11.43	78	456385	19.99	ug/L	99
30) Dibromomethane	12.16	93	58620	21.70	ug/L	98
31) 1,2-Dichloropropane	12.20	63	133665	20.96	ug/L	100
32) Trichloroethene	12.26	95	115085	20.15	ug/L	99
33) Bromodichloromethane	12.32	83	140890	21.02	ug/L	99
34) 2-Chlorovinylethylether	12.85	63	32867	28.05	ug/L	99
35) cis-1,3-Dichloropropene	13.16	75	172517	21.20	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	77918	23.38	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	136555	21.74	ug/L	98
38) 1,1,2-Trichloroethane	13.94	83	62074	20.56	ug/L	99
40) Toluene	14.20	92	260428	20.06	ug/L	96
42) 1,3-Dichloropropane	14.26	76	131189	20.83	ug/L	96

(#) = qualifier out of range (m) = manual integration  
 03221104.D 031711.M Tue Mar 22 12:24:02 2011

Quantitation Report (OT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D Vial: 3  
 Acq On : 22 Mar 2011 8:00 am Operator: LC  
 Sample : -BSD1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:23 2011  
 Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : USEPA Method 8260B  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	48696	23.19	ug/L	# 93
44) Dibromochloromethane	14.64	129	78703	20.78	ug/L	99
45) 1,2-Dibromoethane	14.97	107	65715	20.79	ug/L	96
46) Tetrachloroethene	15.20	166	101150	20.26	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	84360	20.47	ug/L	97
48) Chlorobenzene	16.11	112	262002	20.03	ug/L	100
49) Ethylbenzene	16.37	91	493385	20.02	ug/L	100
50) m,p-Xylenes	16.63	106	173014	20.05	ug/L	99
51) Styrene	17.09	104	279919	21.38	ug/L	98
52) o-Xylene	17.19	106	164451	19.60	ug/L	99
55) Bromoform	16.81	173	42463	22.95	ug/L	98
56) 1,1,2,2-Tetrachloroethane	17.17	83	81875	21.88	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	18389	22.59	ug/L	100
58) Isopropylbenzene	17.69	105	455666	23.28	ug/L	99
59) Bromobenzene	18.04	156	99317	22.00	ug/L	100
60) n-Propylbenzene	18.29	91	609145	21.80	ug/L	99
61) 2-Chlorotoluene	18.44	91	336952	20.59	ug/L	99
62) 4-Chlorotoluene	18.55	91	347985	21.45	ug/L	99
63) 1,3,5-Trimethylbenzene	18.69	105	363351	21.49	ug/L	99
64) tert-Butylbenzene	19.08	119	306891	21.32	ug/L	99
65) 1,2,4-Trimethylbenzene	19.23	105	368260	21.66	ug/L	100
66) sec-Butylbenzene	19.38	105	518229	21.00	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	195249	21.22	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	197785	21.35	ug/L	100
69) p-Isopropyltoluene	19.60	119	413056	21.90	ug/L	98
70) 1,2-Dichlorobenzene	20.01	146	169697	21.21	ug/L	100
71) n-Butylbenzene	20.11	91	461412	21.98	ug/L	94
72) 1,2-Dibromo-3-chloropropan	20.57	157	11169	22.40	ug/L	98
73) 1,2,4-Trichlorobenzene	22.27	180	125162	24.22	ug/L	100
74) Naphthalene	22.62	128	164549	24.01	ug/L	100
75) Hexachlorobutadiene	22.68	225	74058	22.44	ug/L	99
76) 1,2,3-Trichlorobenzene	22.89	180	98292	23.33	ug/L	

(#) = qualifier out of range (m) = manual integration  
 03221104.D 031711.M Tue Mar 22 12:24:02 2011

## Quantitation Report

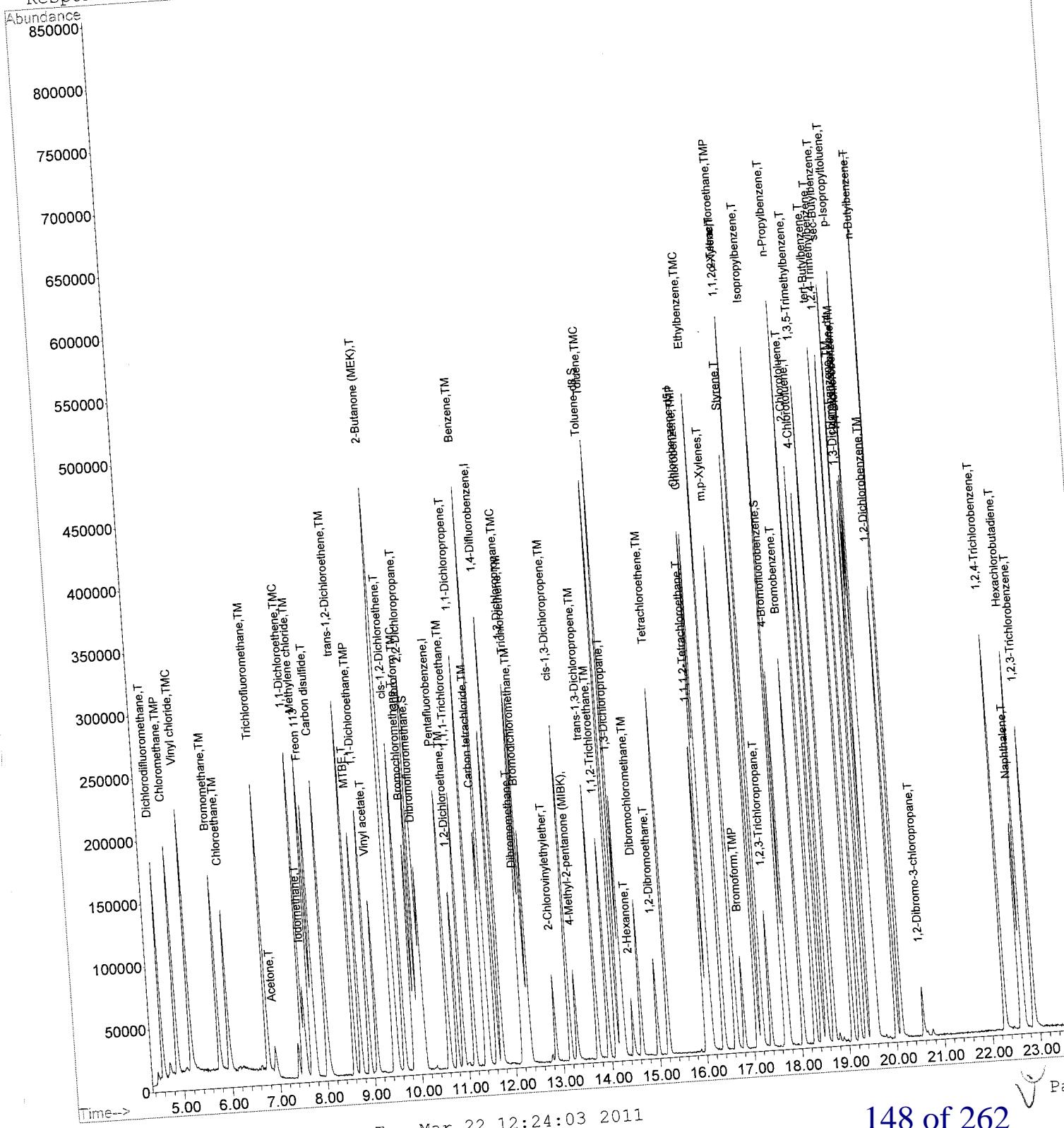
Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221104.D  
Acq On : 22 Mar 2011 8:00 am  
Sample : -BSD1  
Misc :  
MS Integration Params: RTEINT2.P Quant Res  
Quant Time: Mar 22 12:23 2011  
C:\METHODS\031711.M (R)

Vial: 3  
Operator: LC  
Inst : GCMS7  
Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHOD  
Title : USEPA Method 8260B  
Last Update : Thu Mar 17 14:08:36 2011  
Response via : Initial Calibration

TIC: 03221104.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221105.D  
 Acq On : 22 Mar 2011 8:31 am  
 Sample : -BLK1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:24 2011

Vial: 4  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

✓ 3/22/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.59	168	191048	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.72	114	334286	25.00	ug/L	-0.01
41) Chlorobenzene-d5	16.07	117	277168	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.52	152	127354	25.00	ug/L	-0.01
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	109727	22.83	ug/L	-0.01
Spiked Amount	25.000		Recovery	=	91.32%	
39) Toluene-d8	14.11	98	381083	22.60	ug/L	-0.01
Spiked Amount	25.000		Recovery	=	90.40%	
53) 4-Bromofluorobenzene	17.74	95	133747	22.02	ug/L	-0.01
Spiked Amount	25.000		Recovery	=	88.08%	
<b>Target Compounds</b>						
5) Bromomethane	5.77	94	900	0.39	ug/L	#12/n=31
8) Acetone	6.98	43	1800	Below Cal	#	48
9) Iodomethane	7.55	142	130	0.16	ug/L	#32
24) 1,2-Dichloroethane	10.59	62	985	0.16	ug/L	#1
73) 1,2,4-Trichlorobenzene	22.29	180	891	0.17	ug/L	87
74) Naphthalene	22.62	128	8874	1.30	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	993	0.24	ug/L	89

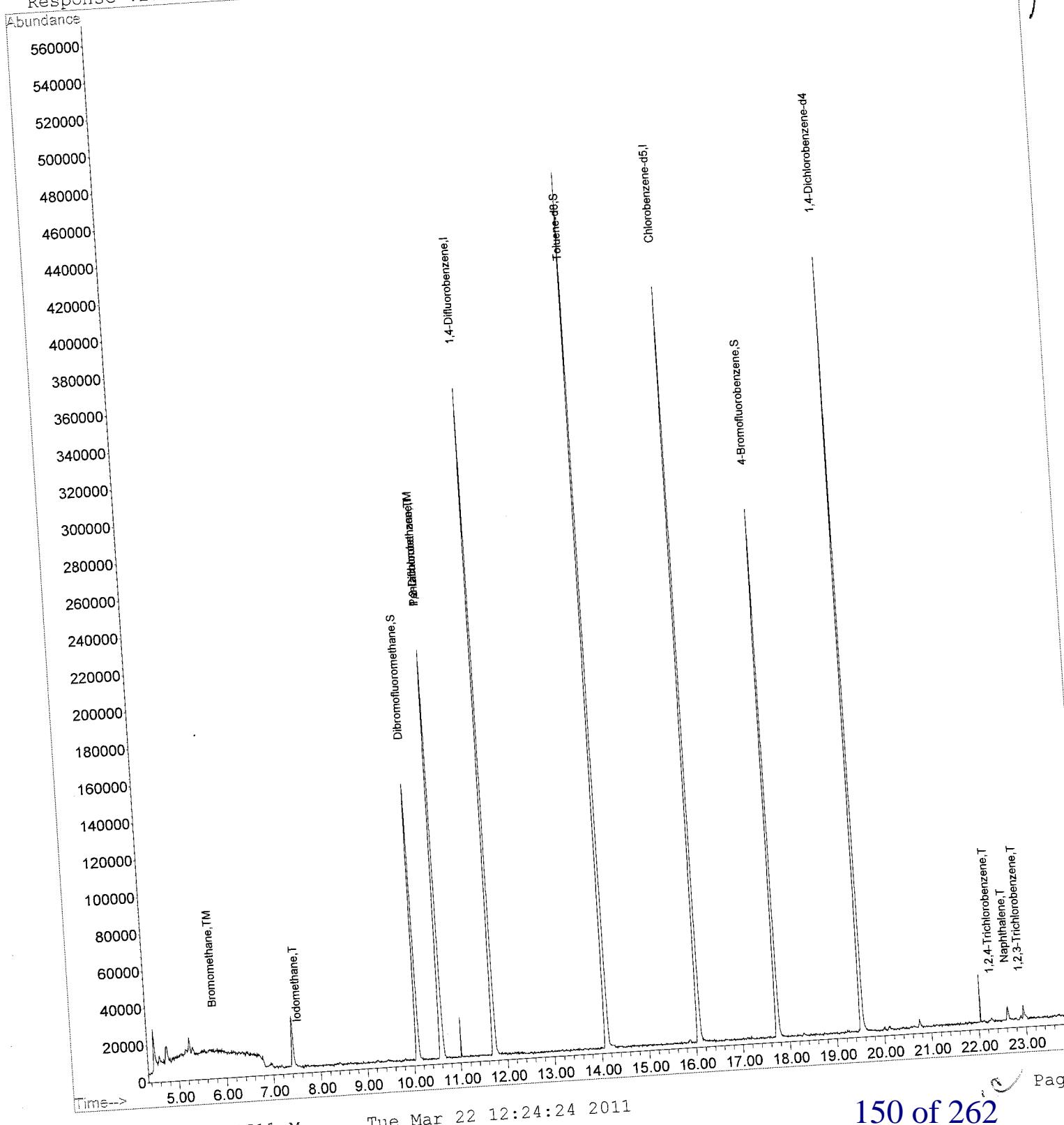
(#) = qualifier out of range (m) = manual integration  
 03221105.D 031711.M Tue Mar 22 12:24:24 2011

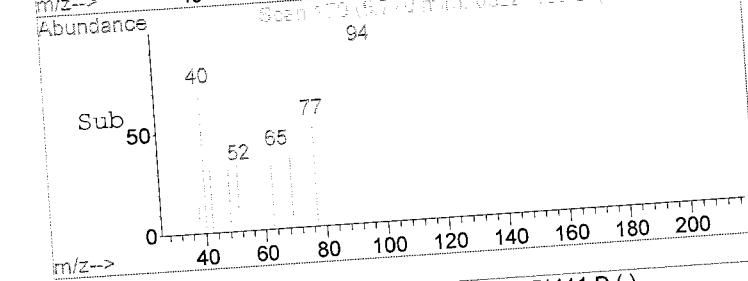
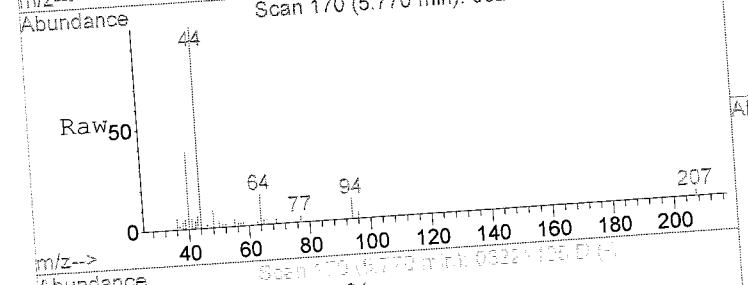
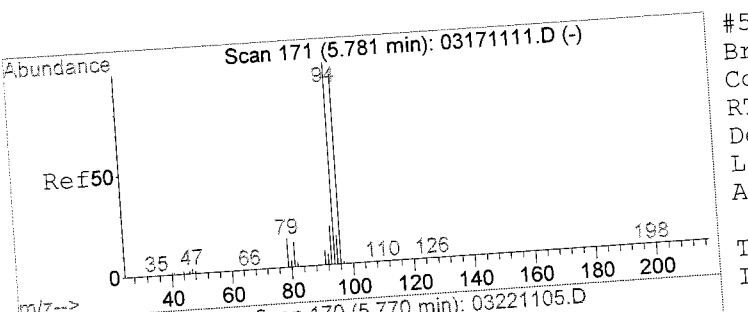
Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221105.D      Vial: 4  
 Acq On : 22 Mar 2011 8:31 am      Operator: LC  
 Sample : -BLK1      Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:24 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:24 2011      Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:24 2011      Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

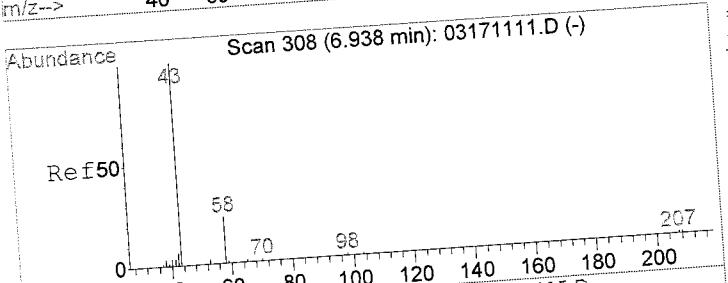
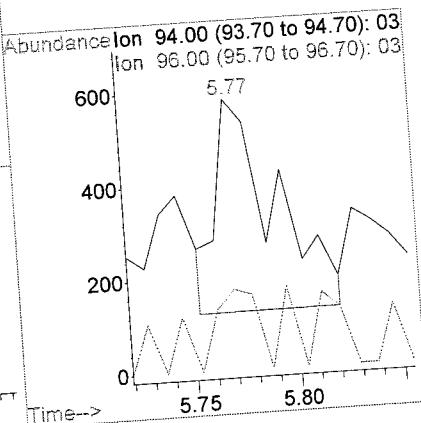
TIC: 03221105.D





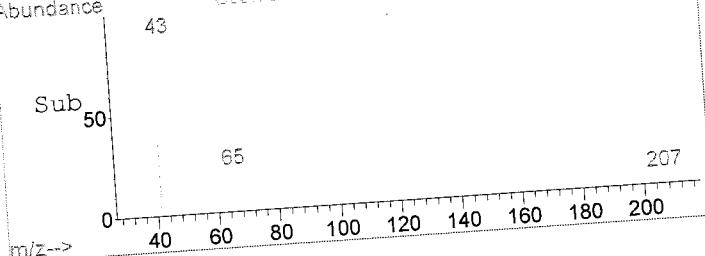
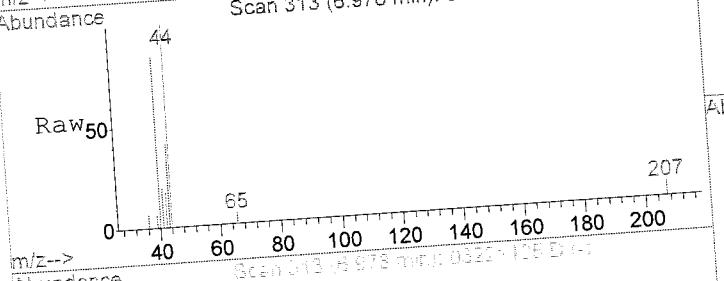
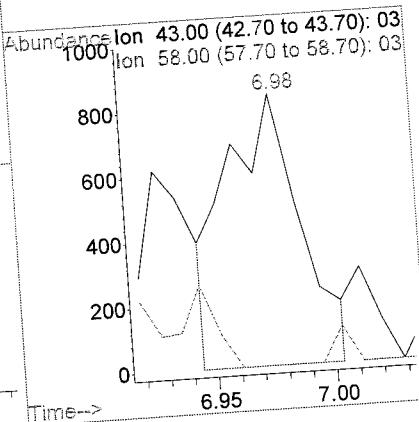
#5  
Bromomethane  
Concen: 0.39 ug/L  
RT: 5.77 min Scan# 170  
Delta R.T. -0.01 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

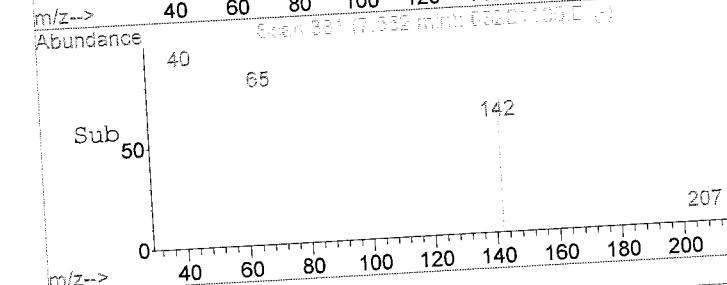
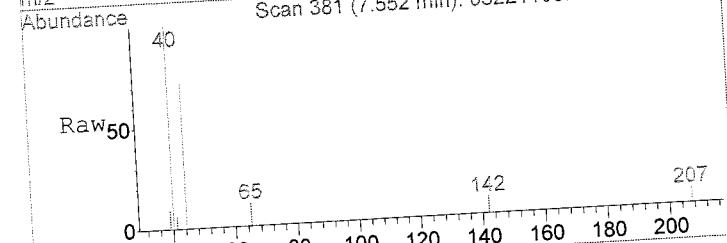
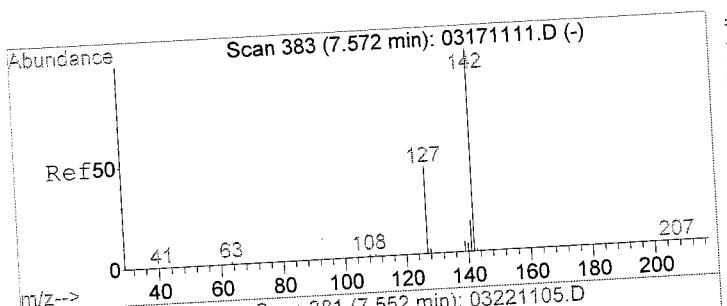
Tgt Ion: 94 Resp: 900  
Ion Ratio Lower Upper  
94 100  
96 26.1 74.0 111.0#



#8  
Acetone  
Concen: Below Cal  
RT: 6.98 min Scan# 313  
Delta R.T. 0.04 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

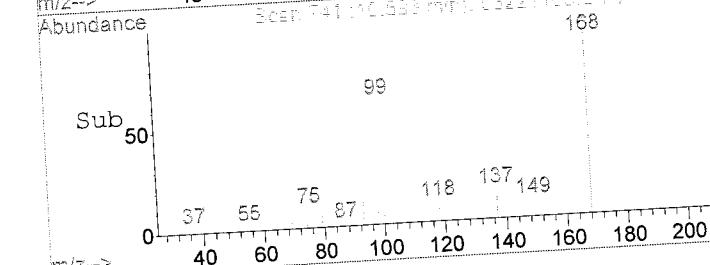
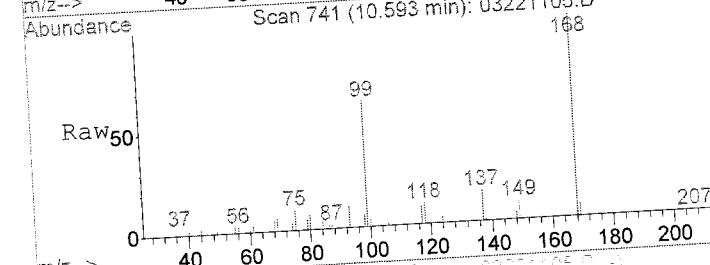
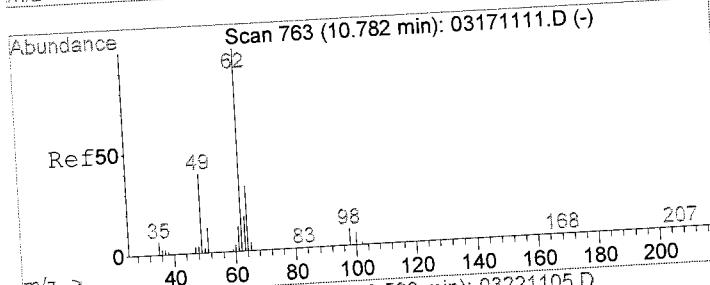
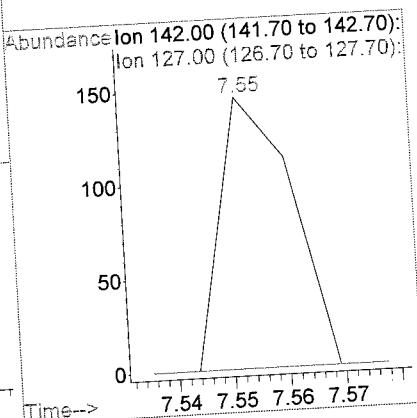
Tgt Ion: 43 Resp: 1800  
Ion Ratio Lower Upper  
43 100  
58 0.0 21.2 31.8#





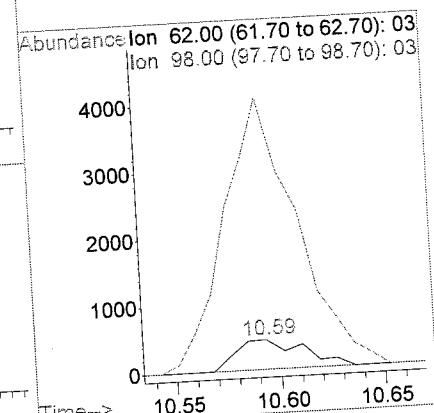
#9  
Iodomethane  
Concen: 0.16 ug/L  
RT: 7.55 min Scan# 381  
Delta R.T. -0.02 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

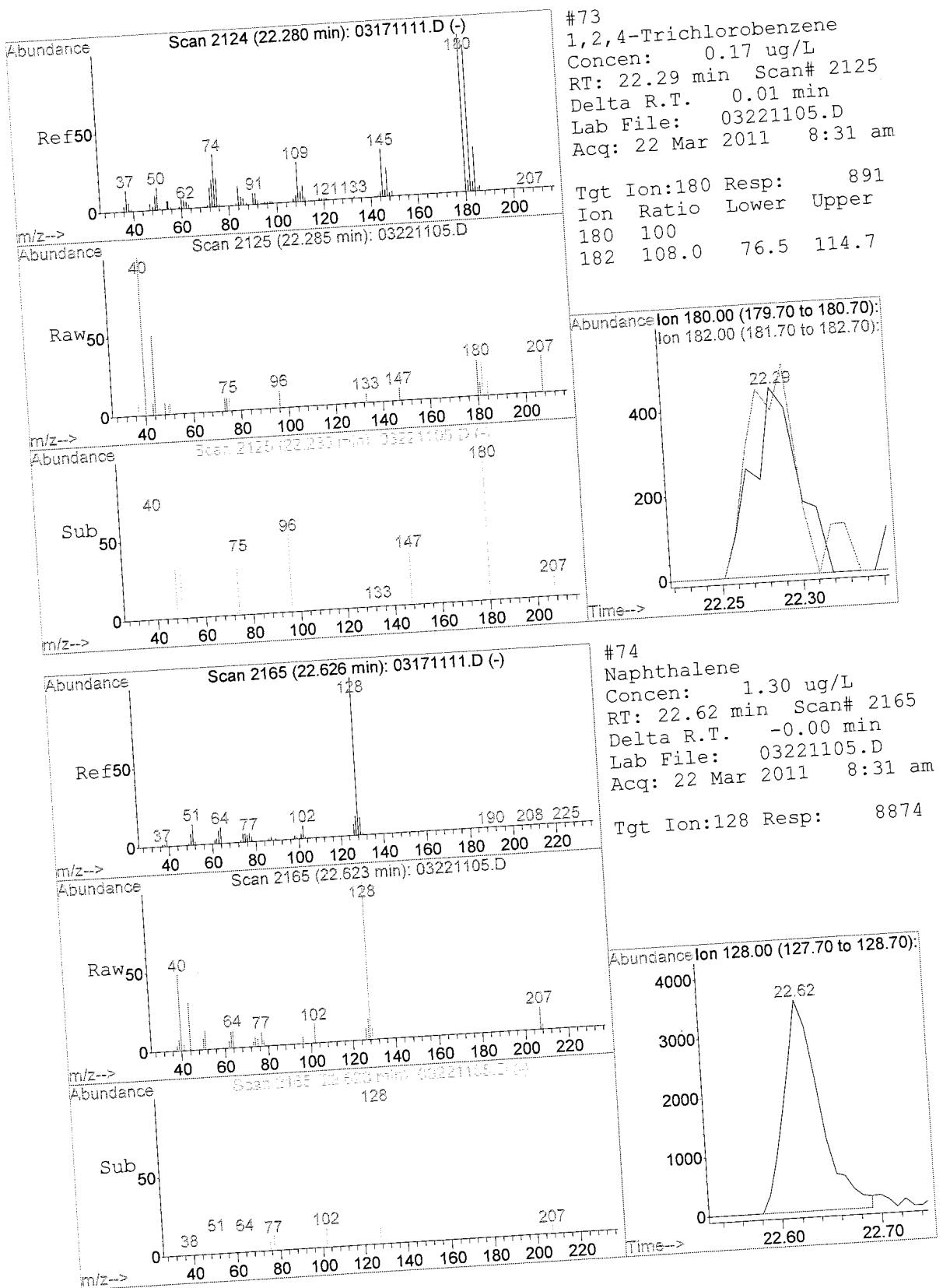
Tgt Ion: 142 Resp: 130  
Ion Ratio Lower Upper  
142 100  
127 0.0 35.5 53.3#

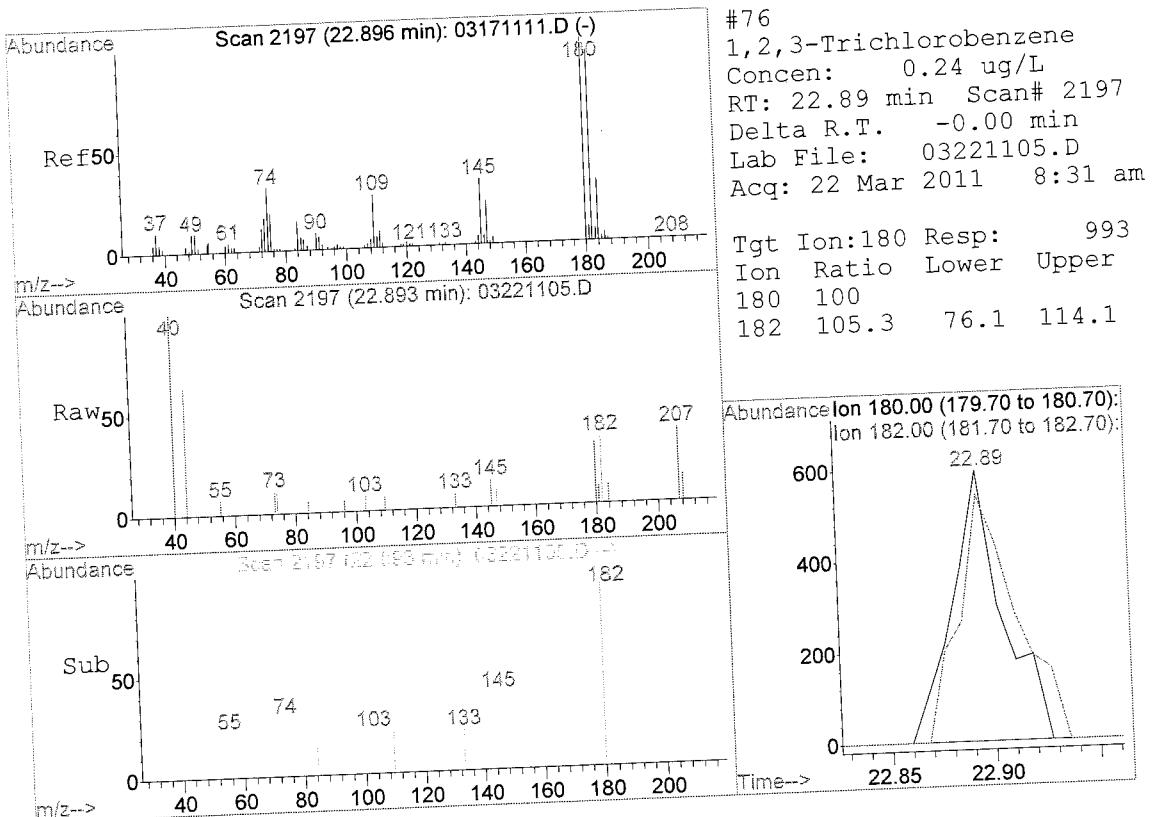


#24  
1,2-Dichloroethane  
Concen: 0.16 ug/L  
RT: 10.59 min Scan# 741  
Delta R.T. -0.19 min  
Lab File: 03221105.D  
Acq: 22 Mar 2011 8:31 am

Tgt Ion: 62 Resp: 985  
Ion Ratio Lower Upper  
62 100  
98 988.6 7.0 10.6#







Quantitation Report (OT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221108.D Vial: 7  
 Acq On : 22 Mar 2011 10:03 am Operator: LC  
 Sample : PUC0982-02 Inst : GCMS7  
 Misc : SOURCE Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:25 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	188150	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	330789	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	278096	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127366	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	109514	23.13	ug/l	0.00
Spiked Amount	25.000			Recovery	= 92.52%	
39) Toluene-d8	14.11	98	376684	22.58	ug/L	0.00
Spiked Amount	25.000			Recovery	= 90.32%	
53) 4-Bromofluorobenzene	17.74	95	130058	21.34	ug/L	0.00
Spiked Amount	25.000			Recovery	= 85.36%	
<b>Target Compounds</b>						
5) Bromomethane	5.81	94	106	0.27	ug/L	NSM 99
7) Trichlorofluoromethane	6.78	101	1147	0.13	ug/L	Leight 95 J
8) Acetone	6.94	43	1256	Below Cal	#	67
10) 1,1-Dichloroethene	7.50	96	14372	2.71	ug/L	92
15) MTBE	8.74	73	1363	0.14	ug/L	Rept 81 J
16) 1,1-Dichloroethane	8.91	63	23225	1.90	ug/L	99
19) cis-1,2-Dichloroethene	9.66	96	11914	1.96	ug/L	99
21) Chloroform	9.93	83	14603	1.44	ug/L	96
32) Trichloroethene	12.26	95	44876	7.93	ug/L	99
42) 1,3-Dichloropropane	14.11	76	4370	0.69	ug/L	WRT 72
46) Tetrachloroethene	15.21	166	2169	0.43	ug/L	Leight 90 J

(#) = qualifier out of range (m) = manual integration  
 03221108.D 031711.M Tue Mar 22 12:26:05 2011

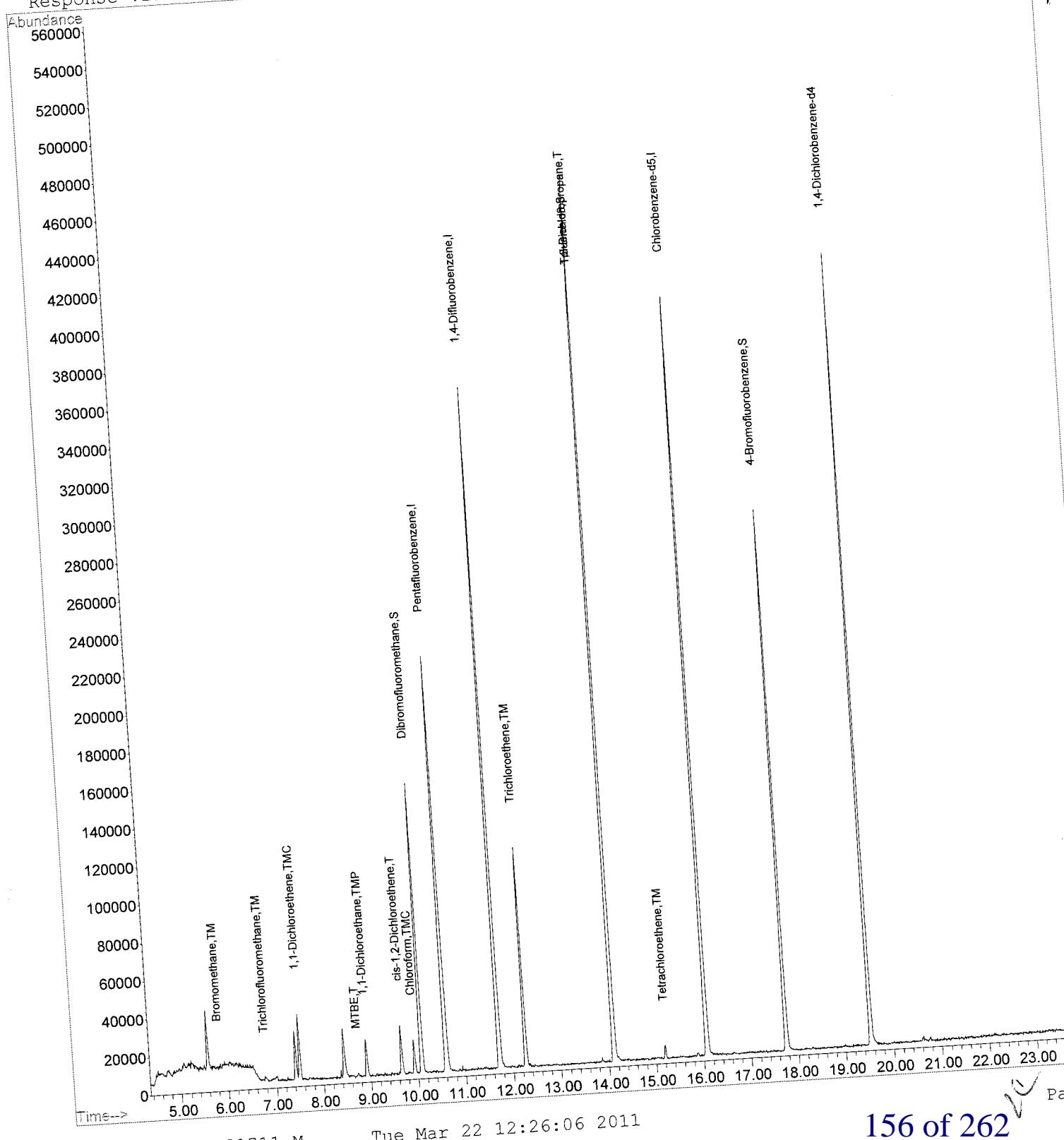
## Quantitation Report

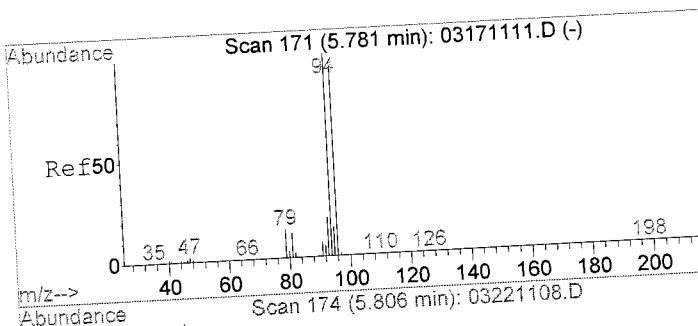
Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221108.D  
 Acq On : 22 Mar 2011 10:03 am  
 Sample : PUC0982-02  
 Misc : SOURCE  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:25 2011  
 Quant Results File: 031711.RES

Vial: 7  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221108.D

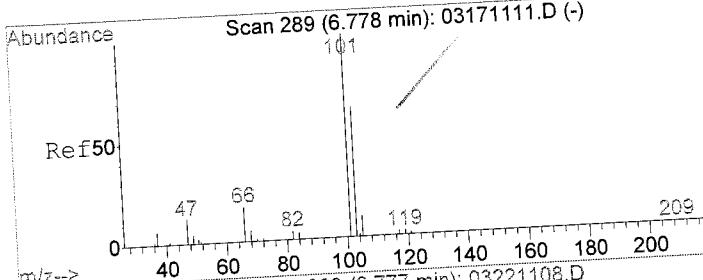
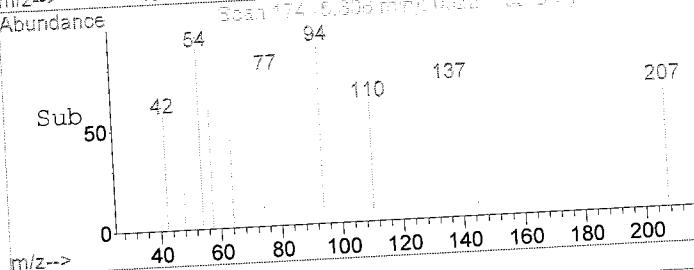
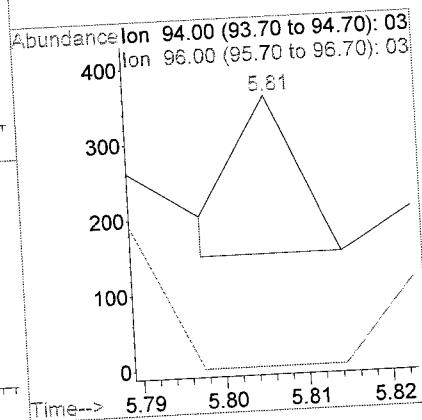
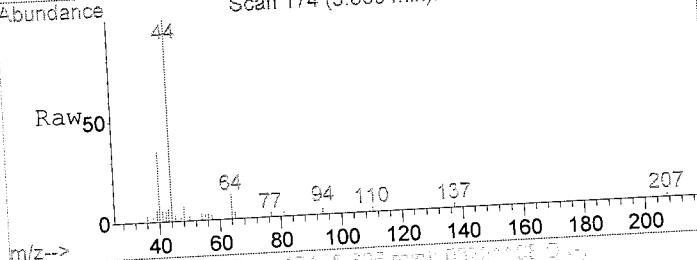




#5  
Bromomethane  
Concen: 0.27 ug/L  
RT: 5.81 min Scan# 174  
Delta R.T. 0.03 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

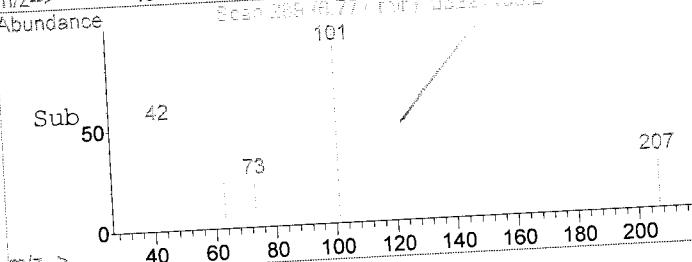
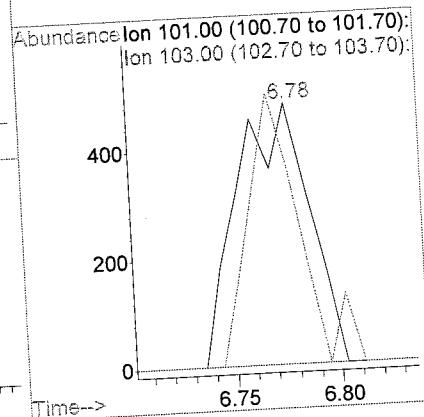
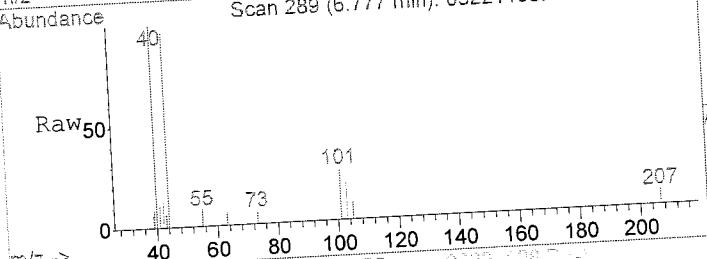
Tgt Ion: 94 Resp: 106  
Ion Ratio Lower Upper  
94 100  
96 91.5 74.0 111.0

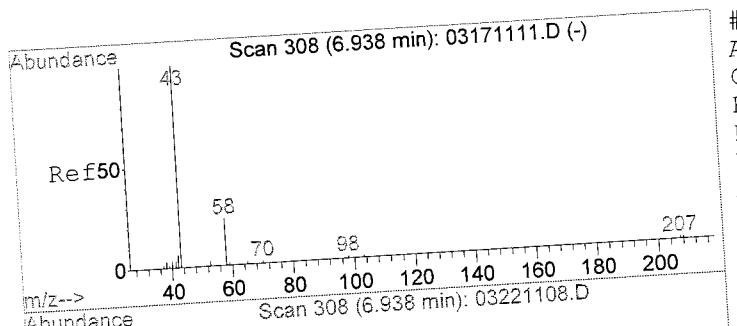
*USM*



#7  
Trichlorofluoromethane  
Concen: 0.13 ug/L  
RT: 6.78 min Scan# 289  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

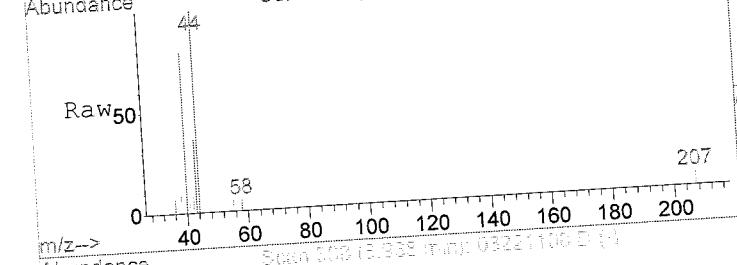
Tgt Ion: 101 Resp: 1147  
Ion Ratio Lower Upper  
101 100  
103 67.3 50.7 76.1



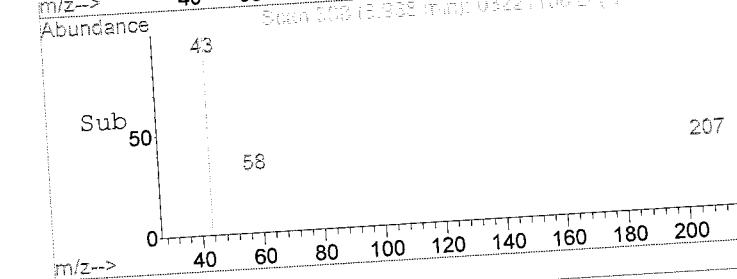
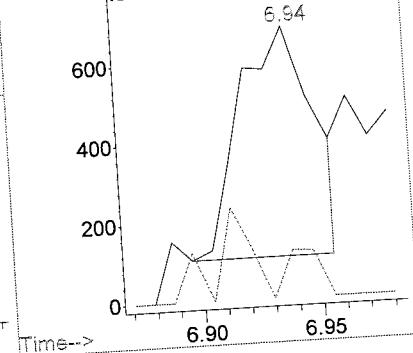


#8  
Acetone  
Concen: Below Cal  
RT: 6.94 min Scan# 308  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 43 Resp: 1256  
Ion Ratio Lower Upper  
43 100  
58 9.6 21.2 31.8#

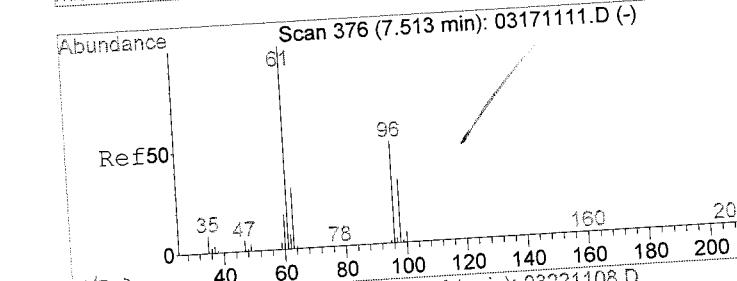


Abundance Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03

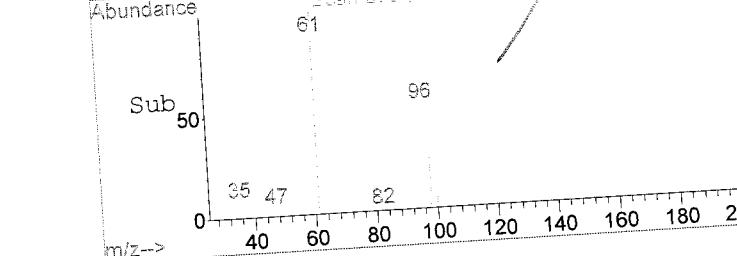
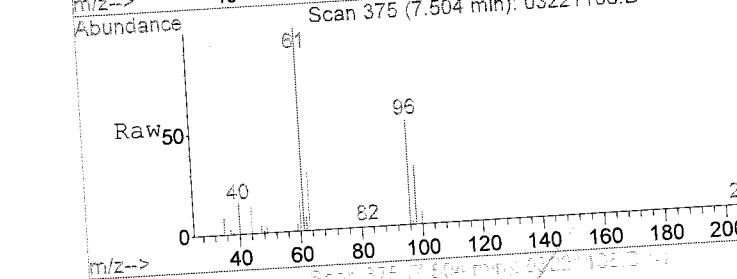
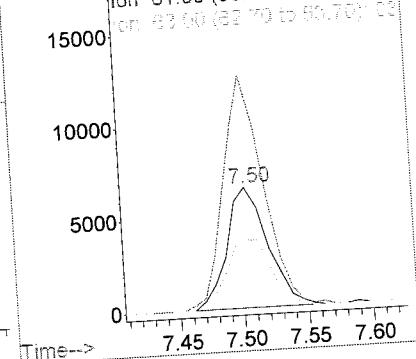


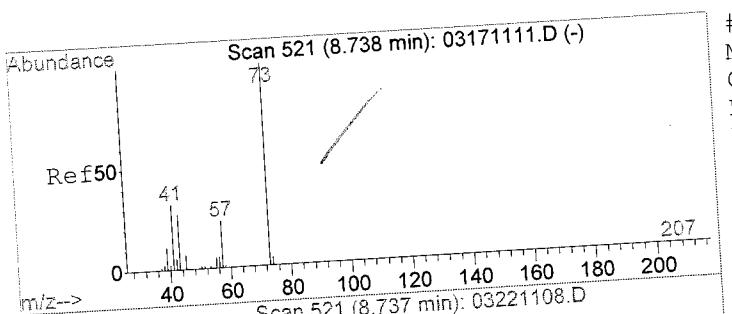
#10  
1,1-Dichloroethene  
Concen: 2.71 ug/L  
RT: 7.50 min Scan# 375  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 96 Resp: 14372  
Ion Ratio Lower Upper  
96 100  
61 186.4 160.7 241.1  
63 61.2 50.9 76.3



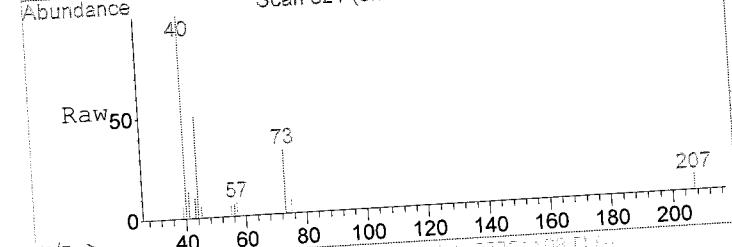
Abundance Ion 96.00 (95.70 to 96.70): 03  
Ion 61.00 (60.70 to 61.70): 03  
Ion 43.00 (42.70 to 43.70): 03



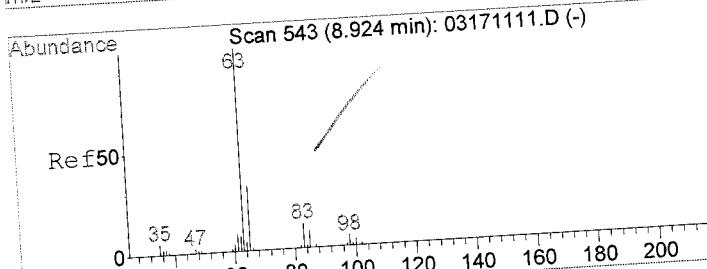
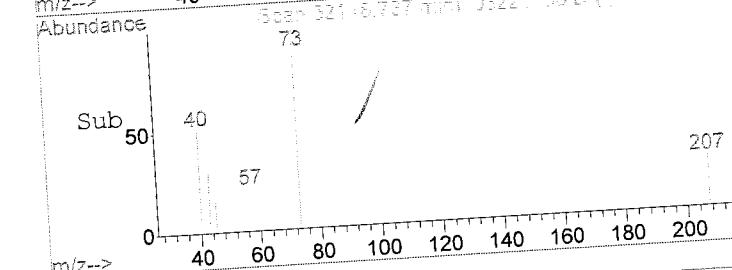
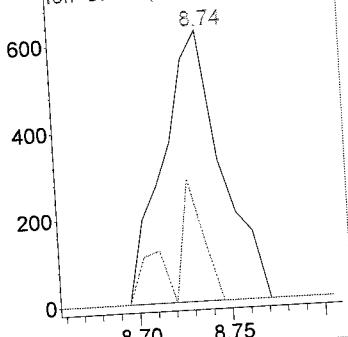


#15  
MTBE  
Concen: 0.14 ug/L  
RT: 8.74 min Scan# 521  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 73 Resp: 1363  
Ion Ratio Lower Upper  
73 100  
57 15.4 20.0 30.0#



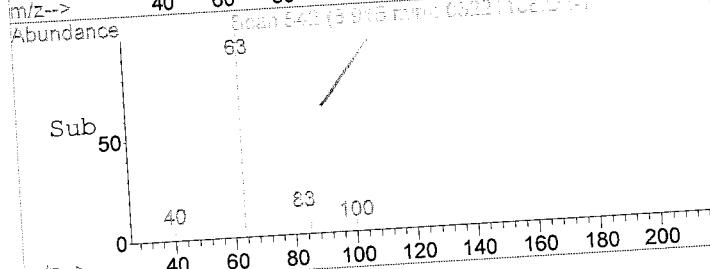
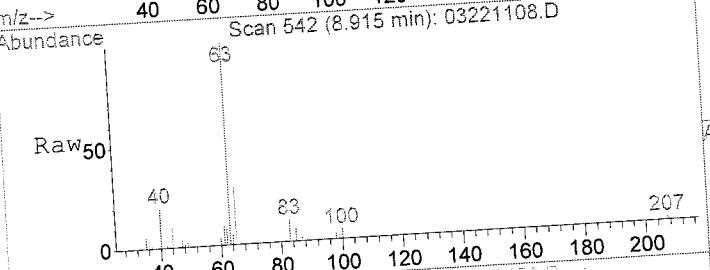
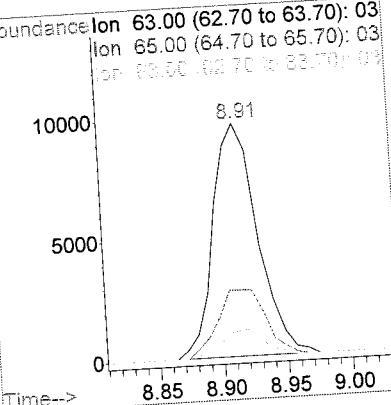
Abundance Ion 73.10 (72.80 to 73.80): 03  
Ion 57.05 (56.75 to 57.75): 03

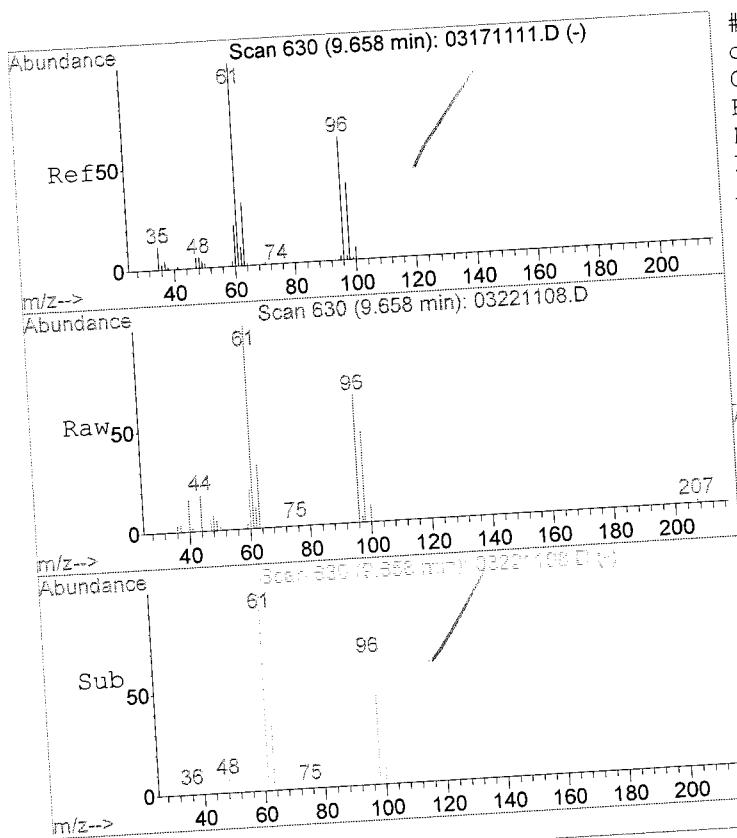


#16  
1,1-Dichloroethane  
Concen: 1.90 ug/L  
RT: 8.91 min Scan# 542  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 63 Resp: 23225  
Ion Ratio Lower Upper  
63 100  
65 31.1 25.2 37.8  
83 11.1 9.2 13.8

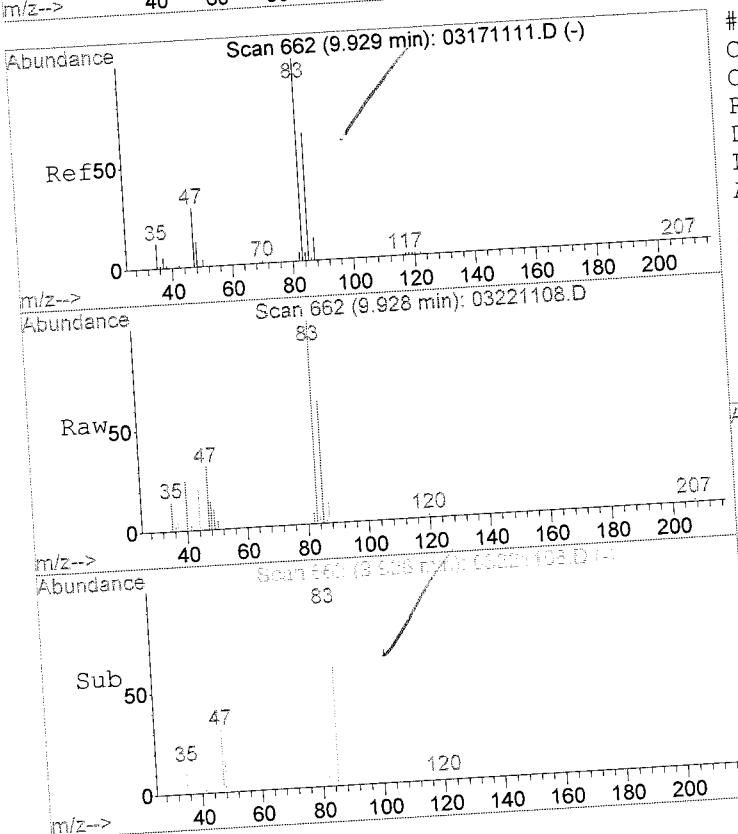
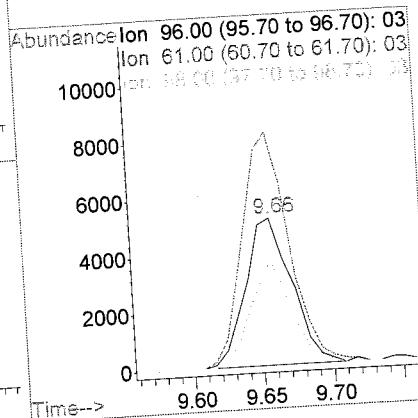
Abundance Ion 63.00 (62.70 to 63.70): 03  
Ion 65.00 (64.70 to 65.70): 03  
Ion 83.00 (82.70 to 83.70): 03





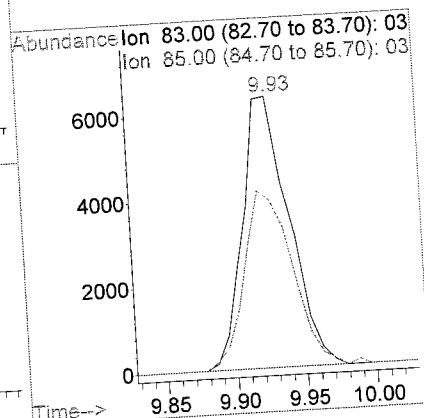
#19  
cis-1,2-Dichloroethene  
Concen: 1.96 ug/L  
RT: 9.66 min Scan# 630  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

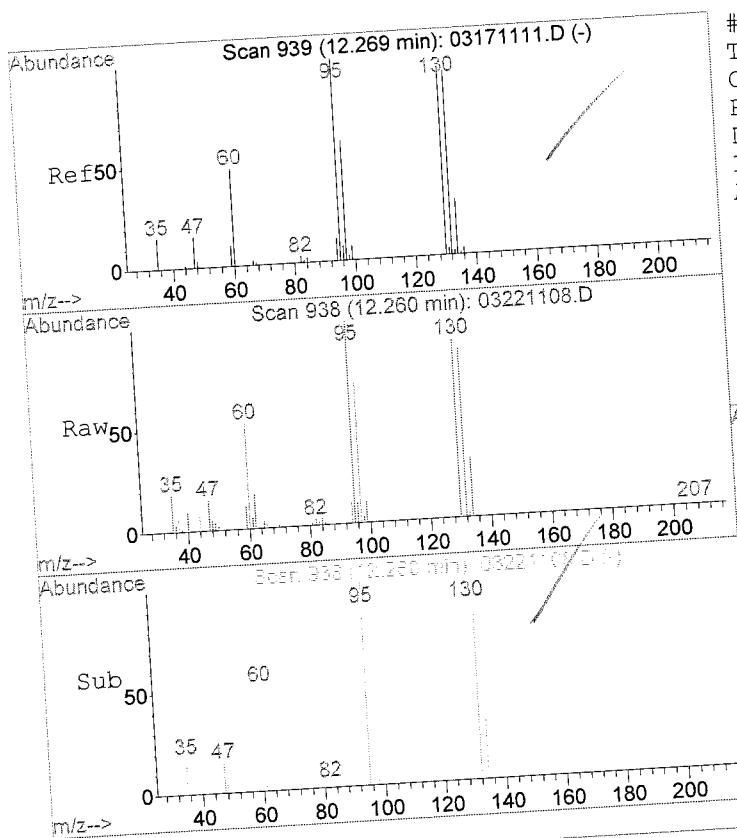
Tgt Ion: 96 Resp: 11914  
Ion Ratio Lower Upper  
96 100  
61 159.6 128.5 192.7  
98 62.5 49.9 74.9



#21  
Chloroform  
Concen: 1.44 ug/L  
RT: 9.93 min Scan# 662  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

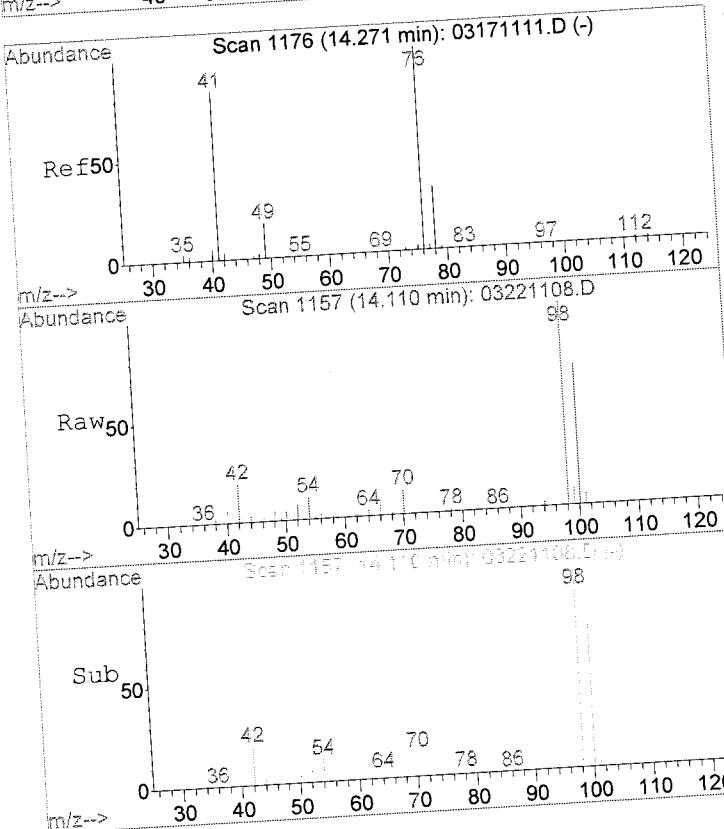
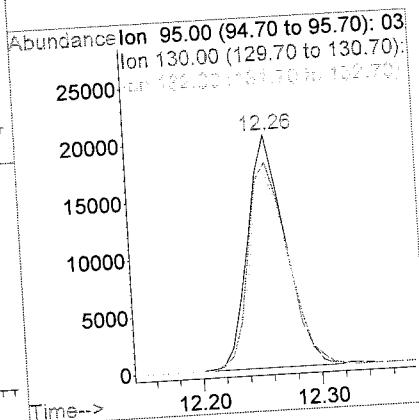
Tgt Ion: 83 Resp: 14603  
Ion Ratio Lower Upper  
83 100  
85 67.9 51.6 77.4





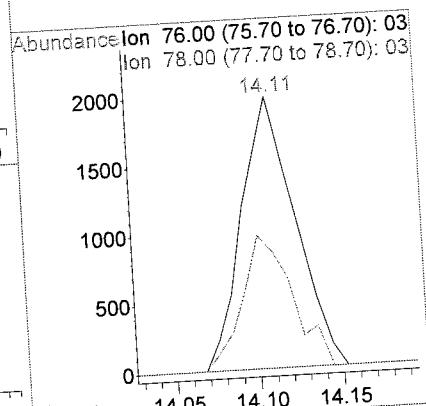
#32  
Trichloroethene  
Concen: 7.93 ug/L  
RT: 12.26 min Scan# 938  
Delta R.T. -0.01 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

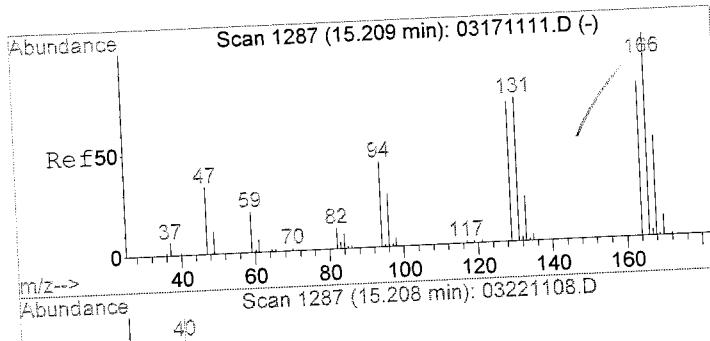
Tgt Ion: 95 Resp: 44876  
Ion Ratio Lower Upper  
95 100  
130 93.0 74.2 111.4  
132 86.5 70.8 106.2



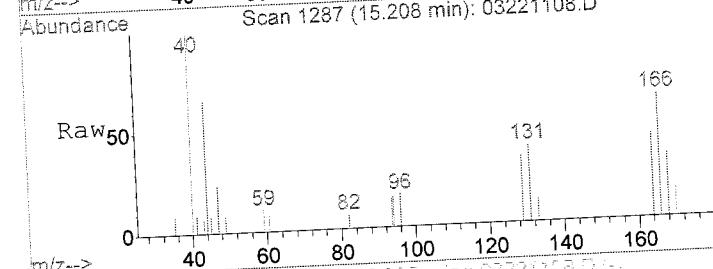
#42  
1,3-Dichloropropane  
Concen: 0.69 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. -0.16 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am

Tgt Ion: 76 Resp: 4370  
Ion Ratio Lower Upper  
76 100  
78 46.1 24.6 37.0#

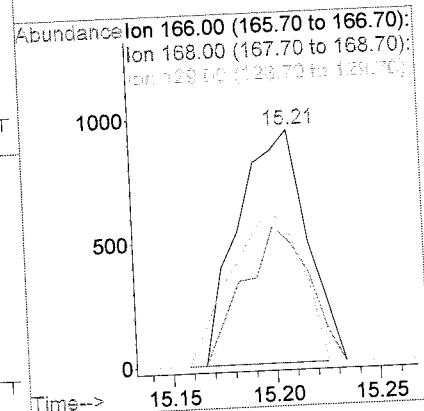
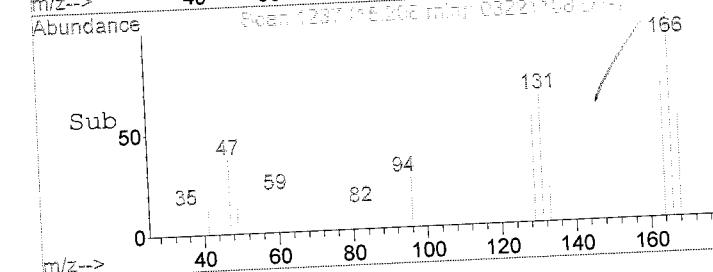




#46  
Tetrachloroethene  
Concen: 0.43 ug/L  
RT: 15.21 min Scan# 1287  
Delta R.T. -0.00 min  
Lab File: 03221108.D  
Acq: 22 Mar 2011 10:03 am



Tgt Ion:166 Resp: 2169  
Ion Ratio Lower Upper  
166 100  
168 55.6 37.9 56.9  
129 67.3 59.8 89.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D  
 Acq On : 22 Mar 2011 10:34 am  
 Sample : -MS1  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011

Vial: 8  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Pentafluorobenzene	10.59	168	187013	25.00	ug/L	-0.01
26) 1,4-Difluorobenzene	11.71	114	325050	25.00	ug/L	-0.01
41) Chlorobenzene-d5	16.06	117	268038	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	124976	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
23) Dibromofluoromethane	10.08	113	111044	23.60	ug/L	0.00
Spiked Amount 25.000			Recovery =	94.40%		
39) Toluene-d8	14.11	98	375789	22.92	ug/L	-0.01
Spiked Amount 25.000			Recovery =	91.68%		
53) 4-Bromofluorobenzene	17.75	95	134033	22.82	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.28%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.59	85	167673	18.98	ug/L	97
3) Chloromethane	4.89	50	253987	17.39	ug/L	99
4) Vinyl chloride	5.18	62	247018	18.99	ug/L	99
5) Bromomethane	5.77	94	122262	18.12	ug/L	99
6) Chloroethane	5.97	64	138341	20.06	ug/L	99
7) Trichlorofluoromethane	6.77	101	216048	23.89	ug/L	97
8) Acetone	6.92	43	30195	27.20	ug/L	98
9) Iodomethane	7.51	96	118322	22.43	ug/L	98
10) 1,1-Dichloroethene	7.70	84	123188	19.85	ug/L	100
11) Methylene chloride	7.77	101	121362	19.43	ug/L	97
12) Freon 113	8.02	76	440334	23.46	ug/L	100
13) Carbon disulfide	8.59	96	118176	20.25	ug/L	97
14) trans-1,2-Dichloroethene	8.72	73	198052	19.86	ug/L	100
15) MTBE	8.91	63	262827	21.59	ug/L	100
16) 1,1-Dichloroethane	9.07	43	230925	24.42	ug/L	57
17) Vinyl acetate	9.46	72	6908	23.69	ug/L	98
18) 2-Butanone (MEK)	9.65	96	129340	21.40	ug/L	97
19) cis-1,2-Dichloroethene	9.86	128	45302	20.48	ug/L	99
20) Bromochloromethane	9.92	83	214765	21.38	ug/L	99
21) Chloroform	10.02	77	161850	19.87	ug/L	100
22) 2,2-Dichloropropane	10.77	62	124884	20.37	ug/L	99
24) 1,2-Dichloroethane	10.90	97	149265	20.69	ug/L	99
25) 1,1,1-Trichloroethane	11.14	75	176835	21.25	ug/L	99
27) 1,1-Dichloropropene	11.38	117	123392	21.48	ug/L	99
28) Carbon tetrachloride	11.43	78	441095	19.83	ug/L	98
29) Benzene	12.16	93	56613	21.51	ug/L	99
30) Dibromomethane	12.20	63	131730	21.20	ug/L	99
31) 1,2-Dichloropropane	12.25	95	156001	28.04	ug/L	99
32) Trichloroethene	12.32	83	134719	20.63	ug/L	# 55
33) Bromodichloromethane	12.89	63	115	Below Cal	#	99
34) 2-Chlorovinylethylether	13.16	75	165392	20.86	ug/L	100
35) cis-1,3-Dichloropropene	13.29	43	75059	23.12	ug/L	99
36) 4-Methyl-2-pantanone (MIBK)	13.72	75	133331	21.79	ug/L	98
37) trans-1,3-Dichloropropene	13.94	83	62511	21.25	ug/L	99
38) 1,1,2-Trichloroethane	14.21	92	253680	20.06	ug/L	97
40) Toluene	14.27	76	125269	20.65	ug/L	97
42) 1,3-Dichloropropane						

(#) = qualifier out of range (m) = manual integration  
 03221109.D 031711.M Tue Mar 22 12:26:27 2011

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D Vial: 8  
 Acq On : 22 Mar 2011 10:34 am Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multipllr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Quant Method : USEPA Method 8260B  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	48952	24.21	ug/L	91
44) Dibromochloromethane	14.64	129	79005	21.66	ug/L	99
45) 1,2-Dibromoethane	14.98	107	64283	21.11	ug/L	98
46) Tetrachloroethene	15.19	166	102000	21.22	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	83023	20.92	ug/L	97
48) Chlorobenzene	16.12	112	259623	20.61	ug/L	100
49) Ethylbenzene	16.37	91	489576	20.63	ug/L	99
50) m,p-Xylenes	16.63	106	169469	20.39	ug/L	100
51) Styrene	17.09	104	251259	19.93	ug/L	98
52) o-Xylene	17.19	106	164097	20.31	ug/L	97
55) Bromoform	16.81	173	41119	22.72	ug/L	100
56) 1,1,2,2-Tetrachloroethane	17.17	83	80806	22.08	ug/L	96
57) 1,2,3-Trichloropropane	17.37	110	17587	22.09	ug/L	98
58) Isopropylbenzene	17.69	105	443465	23.17	ug/L	99
59) Bromobenzene	18.04	156	97005	21.97	ug/L	100
60) n-Propylbenzene	18.30	91	600146	21.97	ug/L	99
61) 2-Chlorotoluene	18.44	91	331120	20.69	ug/L	100
62) 4-Chlorotoluene	18.54	91	347759	21.92	ug/L	100
63) 1,3,5-Trimethylbenzene	18.69	105	360308	21.79	ug/L	99
64) tert-Butylbenzene	19.08	119	302623	21.50	ug/L	98
65) 1,2,4-Trimethylbenzene	19.22	105	360516	21.69	ug/L	99
66) sec-Butylbenzene	19.37	105	512653	21.24	ug/L	98
67) 1,3-Dichlorobenzene	19.48	146	191411	21.28	ug/L	98
68) 1,4-Dichlorobenzene	19.56	146	197055	21.76	ug/L	100
69) p-Isopropyltoluene	19.60	119	408509	22.15	ug/L	99
70) 1,2-Dichlorobenzene	20.01	146	168894	21.58	ug/L	100
71) n-Butylbenzene	20.11	91	456627	22.24	ug/L	91
72) 1,2-Dibromo-3-chloropropan	20.58	157	10528	21.59	ug/L	100
73) 1,2,4-Trichlorobenzene	22.27	180	118528	23.45	ug/L	100
74) Naphthalene	22.61	128	152867	22.81	ug/L	98
75) Hexachlorobutadiene	22.67	225	74190	22.99	ug/L	100
76) 1,2,3-Trichlorobenzene	22.89	180	96540	23.43	ug/L	100

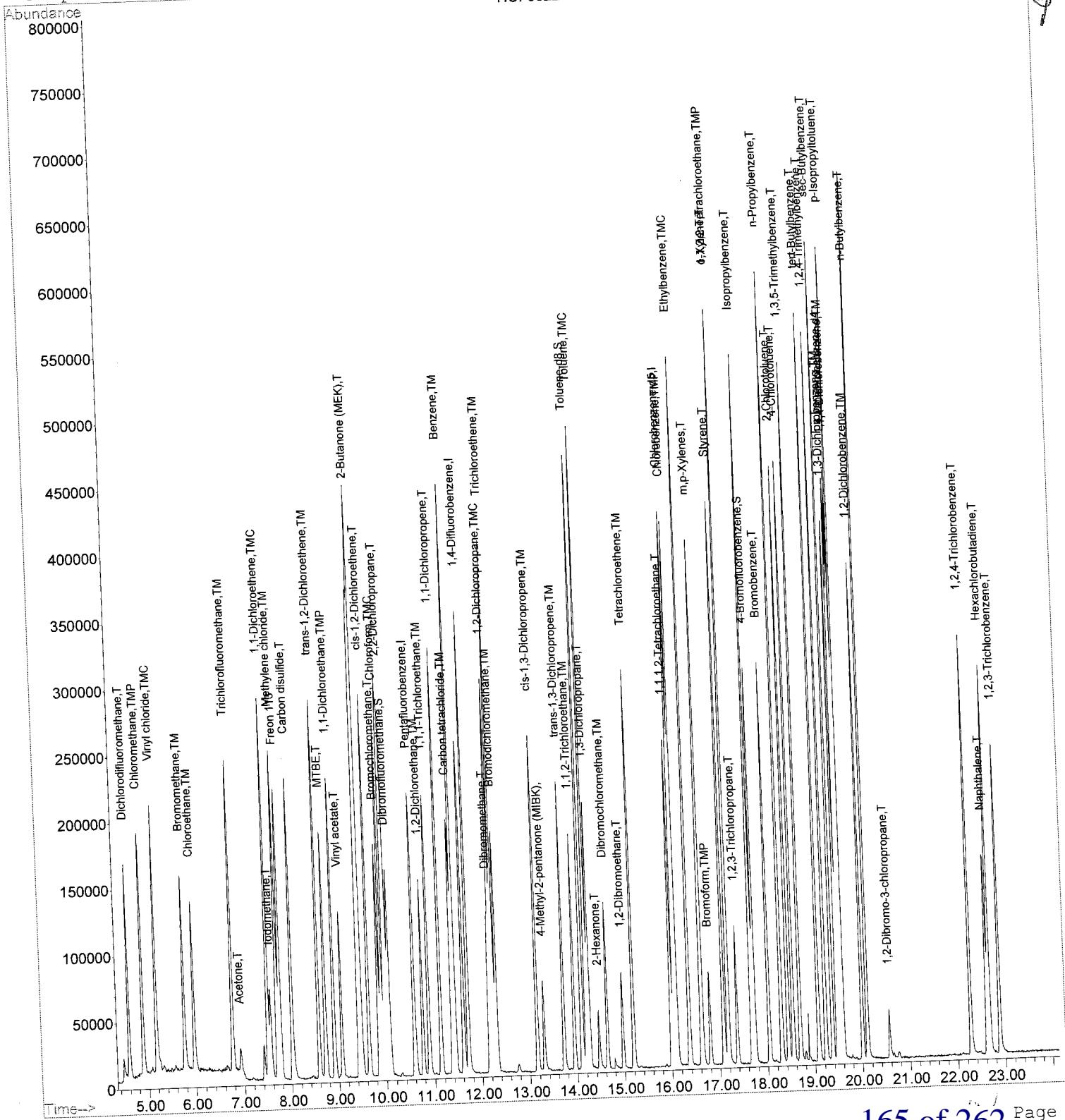
(#) = qualifier out of range (m) = manual integration  
 03221109.D 031711.M Tue Mar 22 12:26:28 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221109.D Vial: 8  
 Acq On : 22 Mar 2011 10:34 am Operator: LC  
 Sample : -MS1 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

TIC: 03221109.D



## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\0322110.D  
 Acq On : 22 Mar 2011 11:05 am  
 Sample : -MSD1  
 Misc : 100X 03/22/11  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011

Vial: 9  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

13/22/11

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	186713	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	327964	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.06	117	272122	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	127198	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	108034	22.99	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.96%		
39) Toluene-d8	14.11	98	371265	22.45	ug/L	0.00
Spiked Amount 25.000			Recovery =	89.80%		
53) 4-Bromofluorobenzene	17.74	95	137039	22.98	ug/L	0.00
Spiked Amount 25.000			Recovery =	91.92%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	167290	18.97	ug/L	99
3) Chloromethane	4.89	50	264201	18.12	ug/L	98
4) Vinyl chloride	5.17	62	250008	19.25	ug/L	100
5) Bromomethane	5.77	94	123708	18.37	ug/L	99
6) Chloroethane	5.98	64	137202	19.93	ug/L	98
7) Trichlorofluoromethane	6.77	101	213241	23.62	ug/L	99
8) Acetone	6.93	43	28065	25.05	ug/L	99
9) Iodomethane	7.56	142	102145	24.47	ug/L	98
10) 1,1-Dichloroethene	7.51	96	117328	22.28	ug/L	99
11) Methylene chloride	7.70	84	124814	20.15	ug/L	98
12) Freon 113	7.77	101	119416	19.15	ug/L	100
13) Carbon disulfide	8.02	76	430910	23.00	ug/L	96
14) trans-1,2-Dichloroethene	8.59	96	118271	20.30	ug/L	99
15) MTBE	8.73	73	202171	20.30	ug/L	99
16) 1,1-Dichloroethane	8.92	63	263888	21.71	ug/L	99
17) Vinyl acetate	9.08	43	227435	24.09	ug/L	61
18) 2-Butanone (MEK)	9.47	72	6724	23.12	ug/L	99
19) cis-1,2-Dichloroethene	9.65	96	127577	21.14	ug/L	96
20) Bromochloromethane	9.86	128	46053	20.86	ug/L	99
21) Chloroform	9.92	83	214343	21.37	ug/L	97
22) 2,2-Dichloropropane	10.02	77	158836	19.53	ug/L	99
23) 1,1-Dichloroethane	10.77	62	124391	20.32	ug/L	100
24) 1,2-Dichloroethene	10.90	97	147262	20.45	ug/L	99
25) 1,1,1-Trichloroethane	11.14	75	172867	20.59	ug/L	99
27) 1,1-Dichloropropene	11.38	117	121871	21.03	ug/L	99
28) Carbon tetrachloride	11.43	78	446742	19.90	ug/L	99
29) Benzene	12.16	93	56853	21.41	ug/L	98
30) Dibromomethane	12.20	63	130272	20.78	ug/L	99
31) 1,2-Dichloropropane	12.26	95	158066	28.16	ug/L	99
32) Trichloroethene	12.32	83	137066	20.80	ug/L	99
33) Bromodichloromethane	13.15	63	758	Below Cal	#	55
34) 2-Chlorovinylethylether	13.16	75	164550	20.57	ug/L	99
35) cis-1,3-Dichloropropene	13.16	43	75063	22.91	ug/L	99
36) 4-Methyl-2-pentanone (MIBK)	13.30	43	134829	21.84	ug/L	99
37) trans-1,3-Dichloropropene	13.72	75	63229	21.31	ug/L	98
38) 1,1,2-Trichloroethane	13.94	83	256827	20.13	ug/L	99
40) Toluene	14.20	92	130073	21.12	ug/L	97
42) 1,3-Dichloropropane	14.26	76				

(#) = qualifier out of range (m) = manual integration  
 0322110.D 031711.M Tue Mar 22 12:26:51 2011

## Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221110.D Vial: 9  
 Acq On : 22 Mar 2011 11:05 am Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : ~~100%~~ uc 03|22|1 Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 22 12:26 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

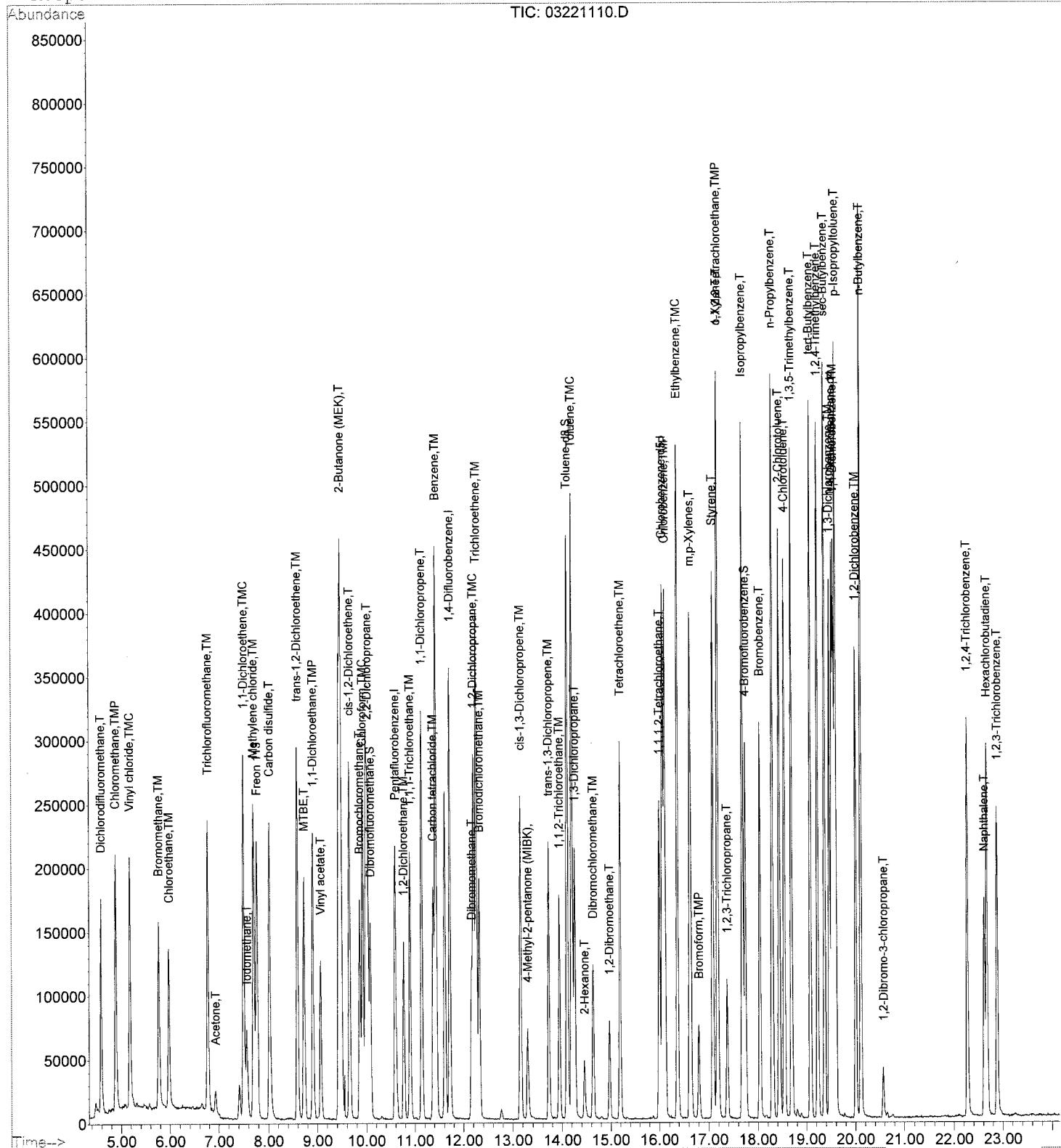
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2-Hexanone	14.46	43	51449	25.06	ug/L	# 89
44) Dibromochloromethane	14.64	129	80270	21.68	ug/L	99
45) 1,2-Dibromoethane	14.97	107	67888	21.96	ug/L	100
46) Tetrachloroethene	15.19	166	103042	21.11	ug/L	99
47) 1,1,1,2-Tetrachloroethane	16.00	131	82512	20.47	ug/L	98
48) Chlorobenzene	16.11	112	261280	20.43	ug/L	99
49) Ethylbenzene	16.37	91	493565	20.48	ug/L	100
50) m,p-Xylenes	16.64	106	172841	20.48	ug/L	99
51) Styrene	17.09	104	252548	19.73	ug/L	98
52) o-Xylene	17.19	106	162978	19.87	ug/L	100
55) Bromoform	16.81	173	41208	22.37	ug/L	94
56) 1,1,2,2-Tetrachloroethane	17.18	83	83750	22.49	ug/L	100
57) 1,2,3-Trichloropropane	17.37	110	18202	22.46	ug/L	95
58) Isopropylbenzene	17.69	105	449720	23.09	ug/L	99
59) Bromobenzene	18.04	156	98766	21.98	ug/L	99
60) n-Propylbenzene	18.29	91	608804	21.90	ug/L	100
61) 2-Chlorotoluene	18.44	91	336063	20.63	ug/L	99
62) 4-Chlorotoluene	18.55	91	349191	21.62	ug/L	100
63) 1,3,5-Trimethylbenzene	18.69	105	356745	21.20	ug/L	99
64) tert-Butylbenzene	19.08	119	301682	21.05	ug/L	100
65) 1,2,4-Trimethylbenzene	19.23	105	364419	21.54	ug/L	98
66) sec-Butylbenzene	19.37	105	518392	21.11	ug/L	100
67) 1,3-Dichlorobenzene	19.48	146	191590	20.92	ug/L	99
68) 1,4-Dichlorobenzene	19.56	146	195033	21.16	ug/L	99
69) p-Isopropyltoluene	19.60	119	409279	21.80	ug/L	100
70) 1,2-Dichlorobenzene	20.01	146	170099	21.36	ug/L	99
71) n-Butylbenzene	20.11	91	458492	21.94	ug/L	100
72) 1,2-Dibromo-3-chloropropan	20.57	157	11352	22.87	ug/L	91
73) 1,2,4-Trichlorobenzene	22.28	180	124334	24.17	ug/L	99
74) Naphthalene	22.62	128	166957	24.48	ug/L	100
75) Hexachlorobutadiene	22.67	225	71863	21.88	ug/L	98
76) 1,2,3-Trichlorobenzene	22.89	180	100478	23.96	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03221110.D 031711.M Tue Mar 22 12:26:52 2011

Quantitation Report

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221110.D Vial: 9  
 Acq On : 22 Mar 2011 11:05 am Operator: LC  
 Sample : -MSD1 Inst : GCMS7  
 Misc : 100X Multiplr: 1.00  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 22 12:26 2011 Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221119.D Vial: 4  
 Acq On : 22 Mar 2011 3:43 pm Operator: LC  
 Sample : PUC1113-01 Inst : GCMS7  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT2.P Quant Results File: 031711.RES  
 Quant Time: Mar 23 6:43 2011

Quant Method : C:\HPCHEM\1...\031711.M (RTE Integrator)

Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) Pentafluorobenzene	10.60	168	177198	25.00	ug/L	0.00
26) 1,4-Difluorobenzene	11.72	114	312344	25.00	ug/L	0.00
41) Chlorobenzene-d5	16.07	117	259516	25.00	ug/L	0.00
54) 1,4-Dichlorobenzene-d4	19.53	152	118101	25.00	ug/L	0.00
<b>System Monitoring Compounds</b>						
23) Dibromofluoromethane	10.08	113	106422	23.87	ug/L	0.00
Spiked Amount	25.000		Recovery	=	95.48%	
39) Toluene-d8	14.11	98	357450	22.69	ug/L	0.00
Spiked Amount	25.000		Recovery	=	90.76%	
53) 4-Bromofluorobenzene	17.75	95	127260	22.37	ug/L	0.00
Spiked Amount	25.000		Recovery	=	89.48%	
<b>Target Compounds</b>						
5) Bromomethane	5.83	94	79	0.27	ug/L	LPL/NT 92
7) Trichlorofluoromethane	6.77	101	2536	0.30	ug/L	92
8) Acetone	6.92	43	1132	Below Cal		48
10) 1,1-Dichloroethene	7.51	96	35013	7.01	ug/L	99
11) Methylene chloride	7.70	84	2967	0.50	ug/L	LPL/NT 87
12) Freon 113	7.76	101	1726	0.29	ug/L	91
14) trans-1,2-Dichloroethene	8.60	96	534	0.10	ug/L	# 67
15) MTBE	8.74	73	1563	0.17	ug/L	# 85
16) 1,1-Dichloroethane	8.92	63	58907	5.11	ug/L	98
18) 2-Butanone (MEK)	9.64	72	53	1.07	ug/L	# wcpf 1
19) cis-1,2-Dichloroethene	9.66	96	60140	10.50	ug/L	99
21) Chloroform	9.93	83	9206	0.97	ug/L	97
24) 1,2-Dichloroethane	10.78	62	964	0.17	ug/L	# wcpf 76
31) 1,2-Dichloropropane	12.26	63	1067	0.18	ug/L	# 90
32) Trichloroethene	12.26	95	266454	49.85	ug/L	98
38) 1,1,2-Trichloroethane	14.11	83	302	0.11	ug/L	# LPL/NT 1
42) 1,3-Dichloropropane	14.11	76	3785	0.64	ug/L	# wcpf 54
46) Tetrachloroethene	15.20	166	10795	2.32	ug/L	98

(#) = qualifier out of range (m) = manual integration  
 03221119.D 031711.M Wed Mar 23 06:43:55 2011

Quantitation Report

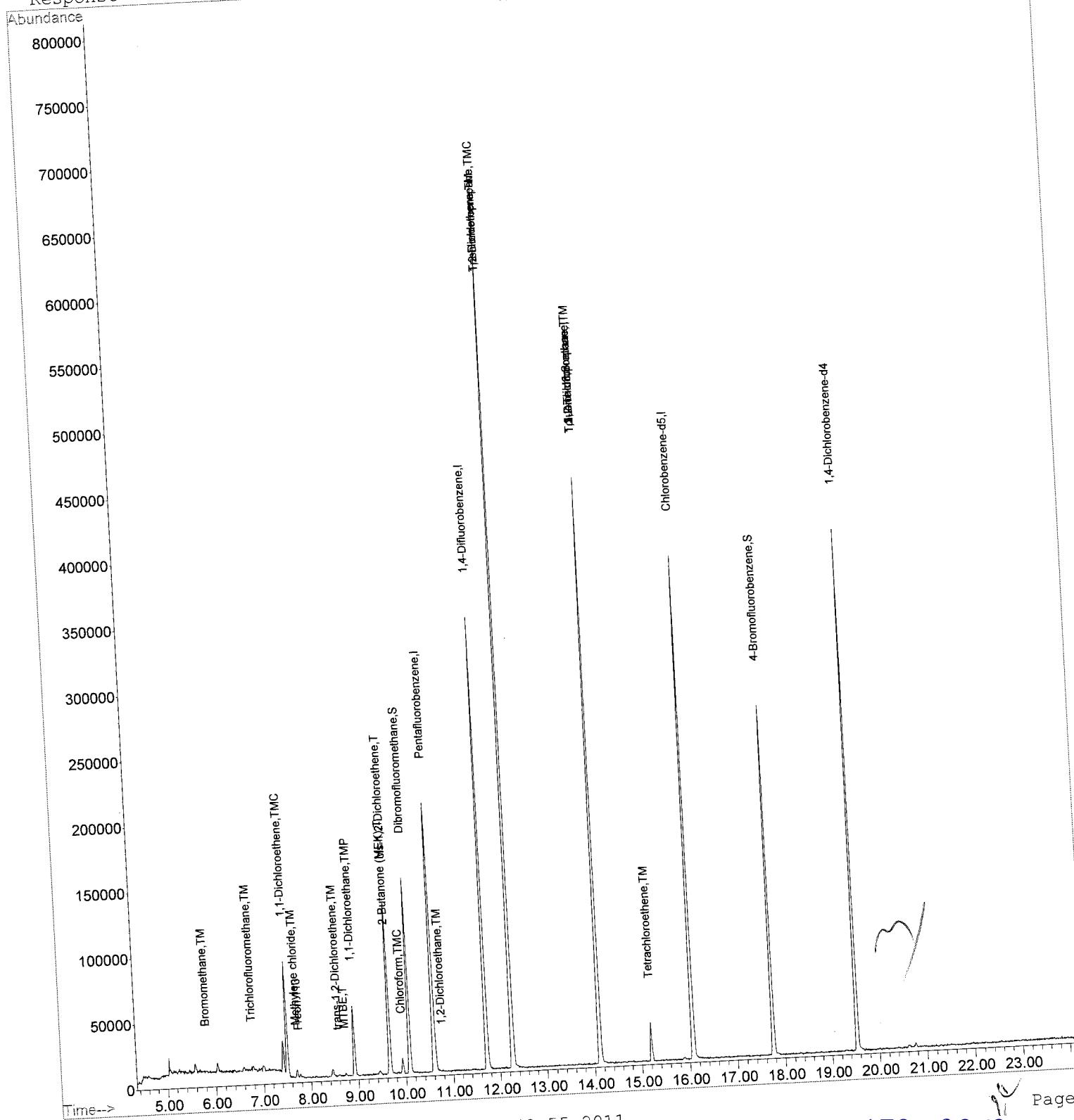
Data File : C:\HPCHEM\1\GCMS7\DATA\032211\03221119.D  
 Acq On : 22 Mar 2011 3:43 pm  
 Sample : PUC1113-01  
 Misc :  
 MS Integration Params: RTEINT2.P  
 Quant Time: Mar 23 6:43 2011

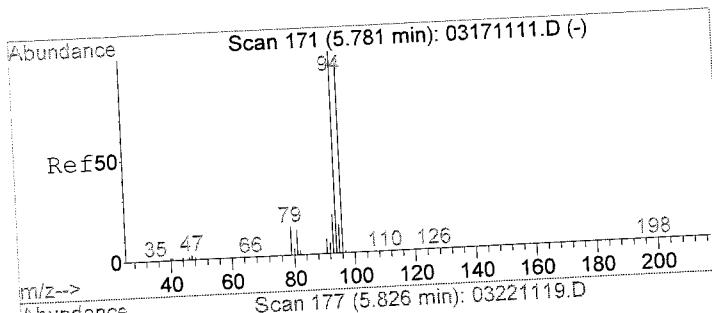
Vial: 4  
 Operator: LC  
 Inst : GCMS7  
 Multiplr: 1.00

Quant Results File: 031711.RES

Method : C:\HPCHEM\1\GCMS7\METHODS\031711.M (RTE Integrator)  
 Title : USEPA Method 8260B  
 Last Update : Thu Mar 17 14:08:36 2011  
 Response via : Initial Calibration

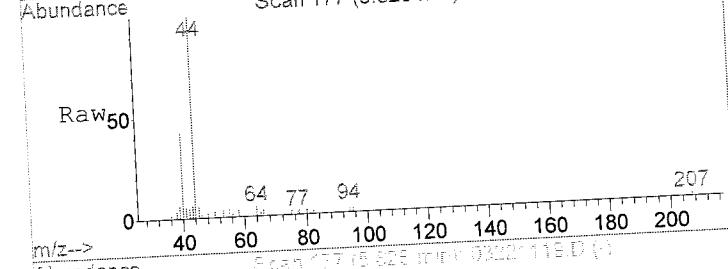
TIC: 03221119.D



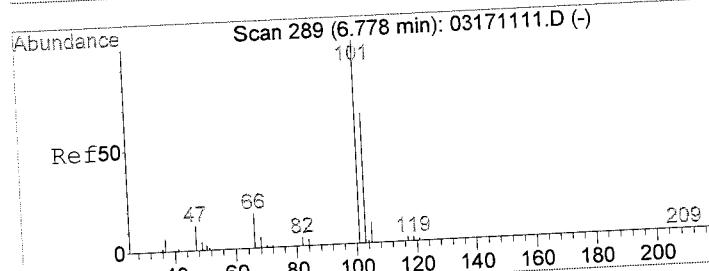
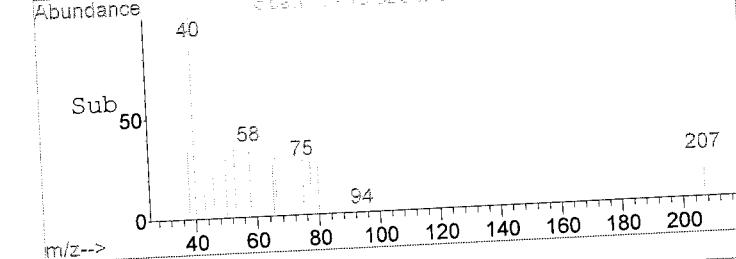
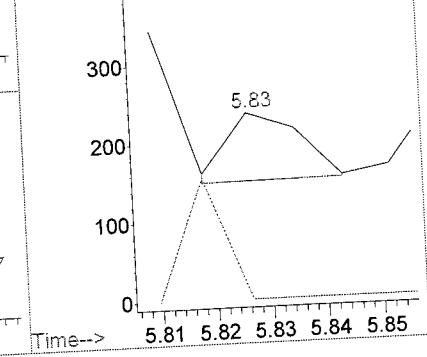


#5  
Bromomethane  
Concen: 0.27 ug/L  
RT: 5.83 min Scan# 177  
Delta R.T. 0.05 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

Tgt Ion: 94 Resp: 79  
Ion Ratio Lower Upper  
94 100  
96 100.0 74.0 111.0

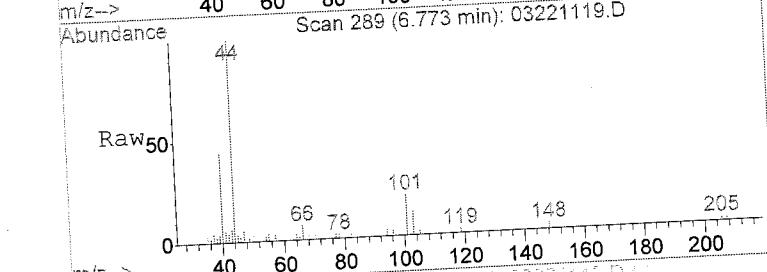


Abundance ion 94.00 (93.70 to 94.70): 03  
400 ion 96.00 (95.70 to 96.70): 03

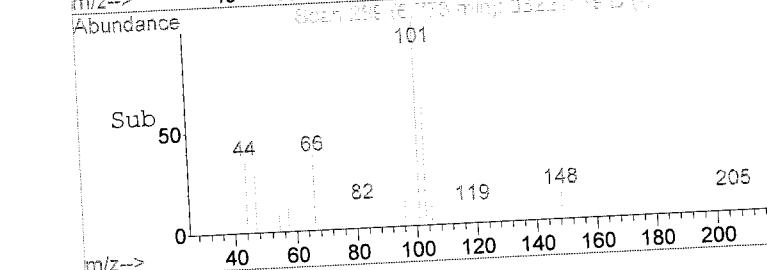
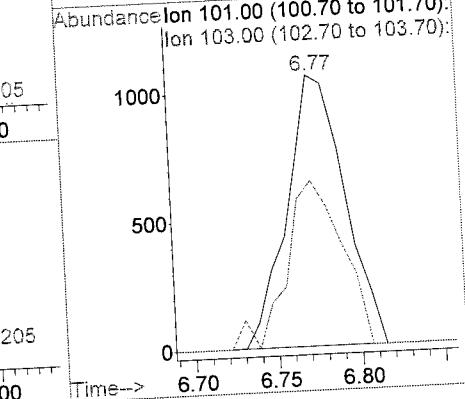


#7  
Trichlorofluoromethane  
Concen: 0.30 ug/L  
RT: 6.77 min Scan# 289  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

Tgt Ion: 101 Resp: 2536  
Ion Ratio Lower Upper  
101 100  
103 57.2 50.7 76.1

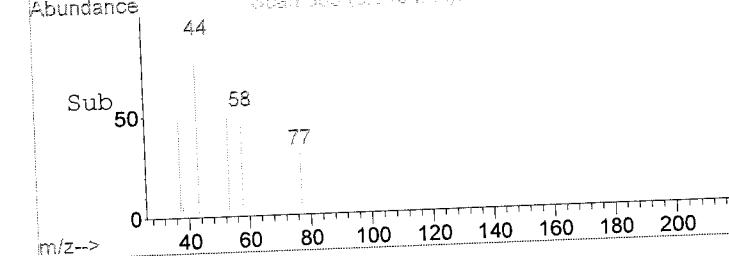
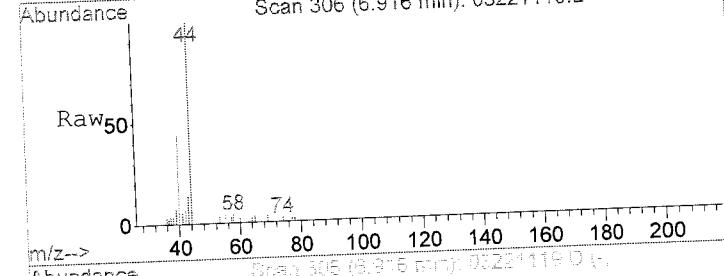
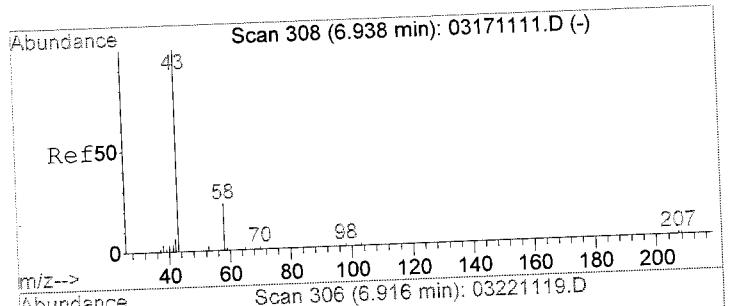


Abundance ion 101.00 (100.70 to 101.70):  
ion 103.00 (102.70 to 103.70):



*[Handwritten signatures]*

Page



#8

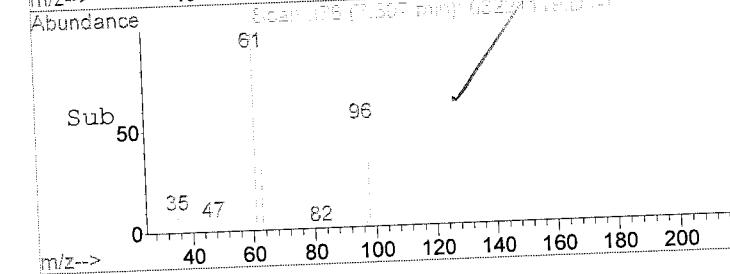
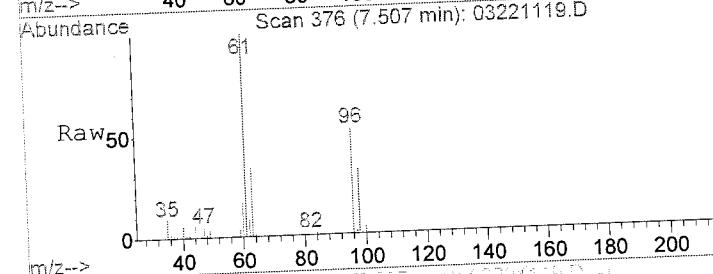
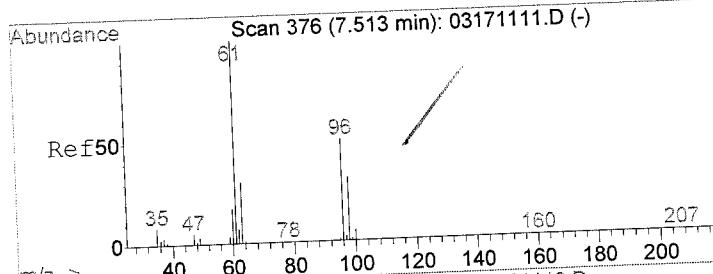
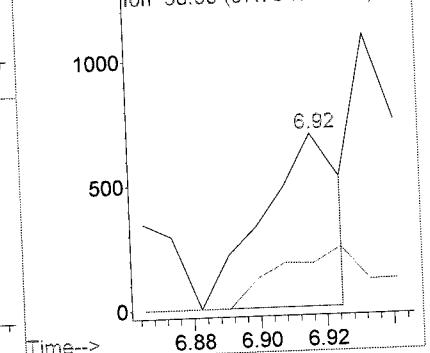
Acetone  
Concen: Below Cal  
RT: 6.92 min Scan# 306  
Delta R.T. -0.02 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

Tgt Ion: 43 Resp: 1132

Ion Ratio Lower Upper

43	100		
58	0.0	21.2	31.8#

Abundance Ion 43.00 (42.70 to 43.70): 03  
Ion 58.00 (57.70 to 58.70): 03



#10

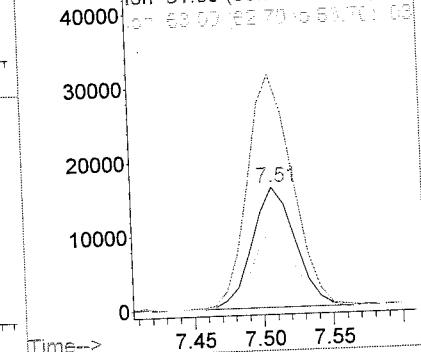
1,1-Dichloroethene  
Concen: 7.01 ug/L  
RT: 7.51 min Scan# 376  
Delta R.T. -0.00 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

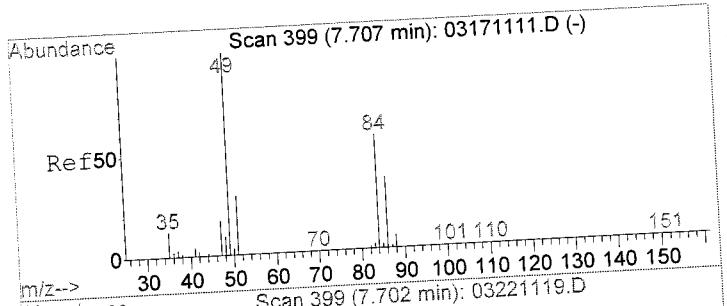
Tgt Ion: 96 Resp: 35013

Ion Ratio Lower Upper

96	100		
61	202.2	160.7	241.1
63	64.5	50.9	76.3

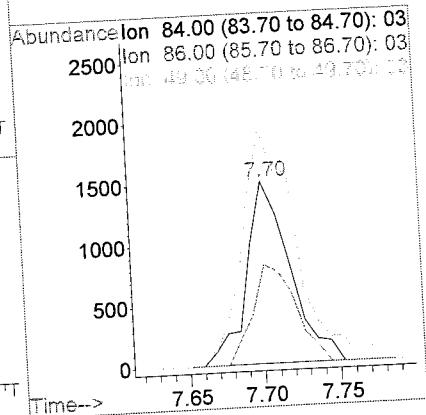
Abundance Ion 96.00 (95.70 to 96.70): 03  
Ion 61.00 (60.70 to 61.70): 03  
Ion 63.00 (62.70 to 63.70): 03





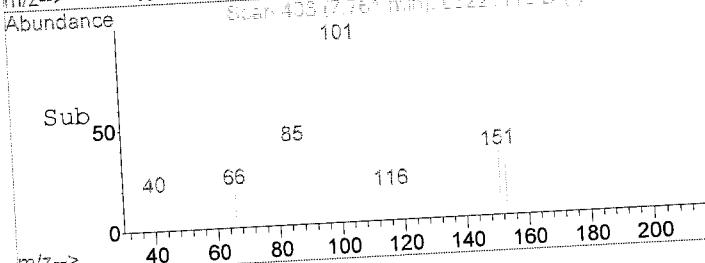
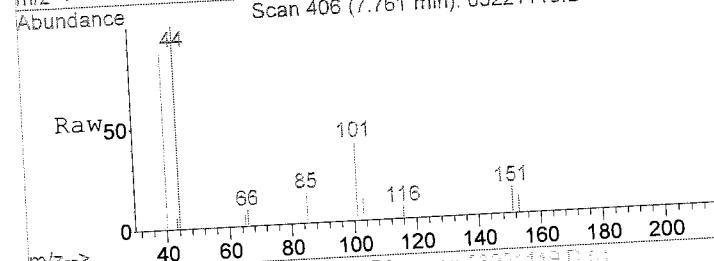
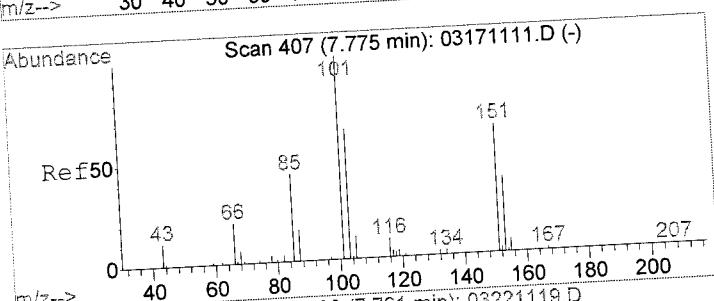
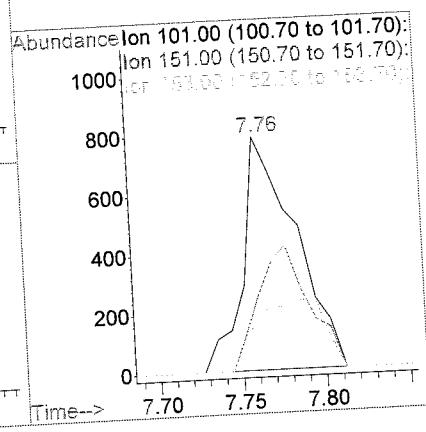
#11  
Methylene chloride  
Concen: 0.50 ug/L  
RT: 7.70 min Scan# 399  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

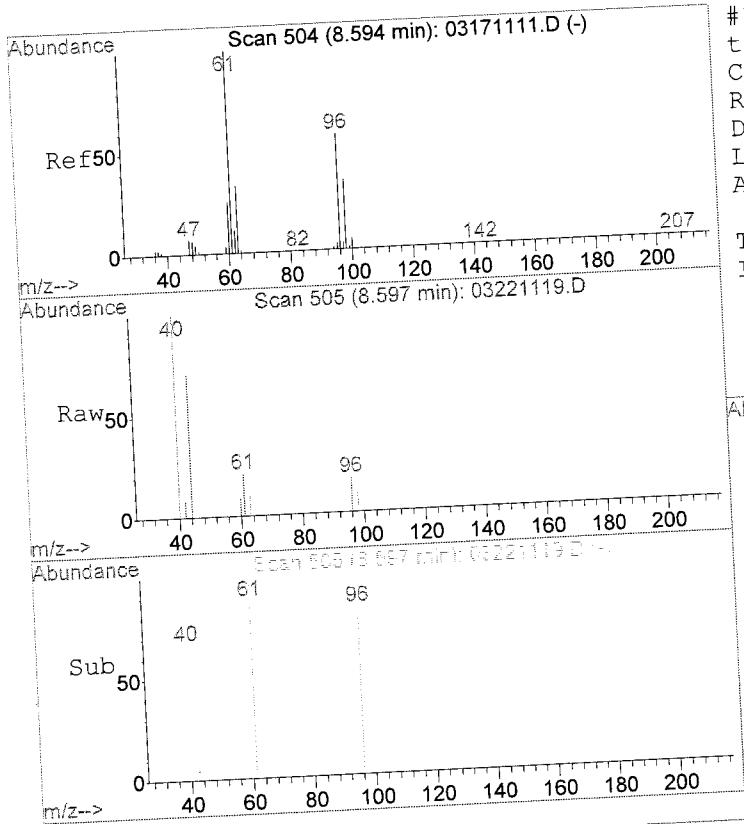
Tgt Ion: 84 Resp: 2967  
Ion Ratio Lower Upper  
84 100  
86 53.8 50.6 76.0  
49 156.0 140.4 210.6



#12  
Freon 113  
Concen: 0.29 ug/L  
RT: 7.76 min Scan# 406  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

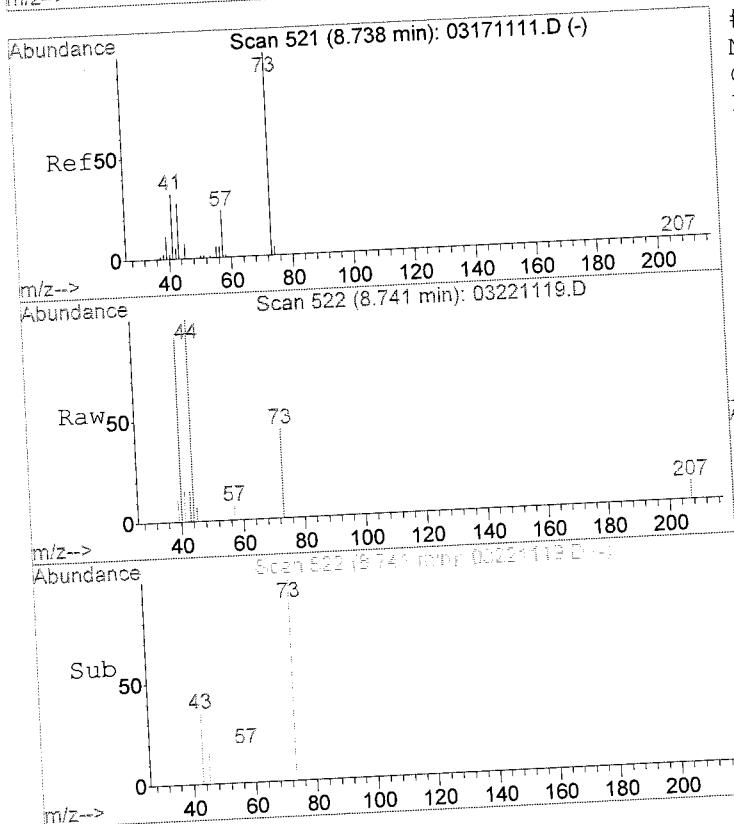
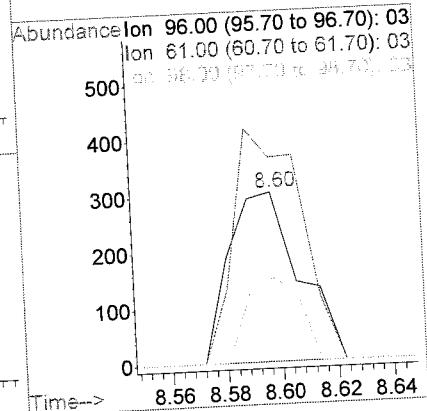
Tgt Ion: 101 Resp: 1726  
Ion Ratio Lower Upper  
101 100  
151 50.7 48.8 73.2  
153 37.4 31.3 46.9





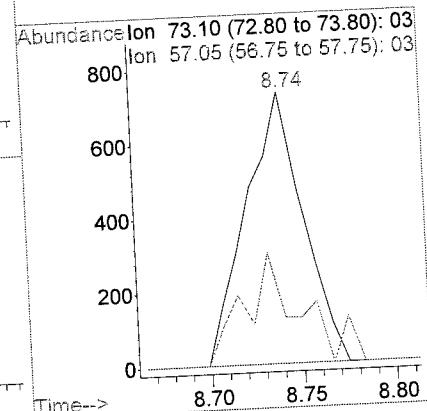
#14  
trans-1,2-Dichloroethene  
Concen: 0.10 ug/L  
RT: 8.60 min Scan# 505  
Delta R.T. 0.00 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

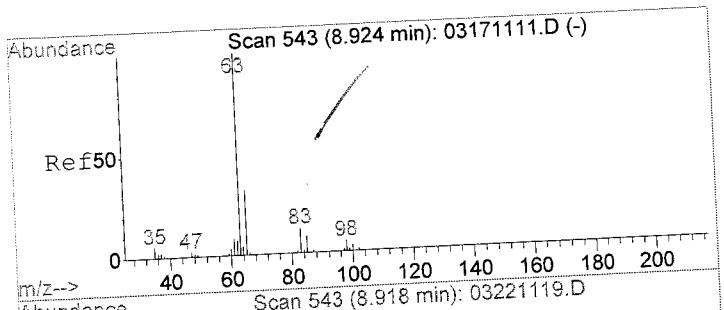
Tgt Ion: 96 Resp: 534  
Ion Ratio Lower Upper  
96 100  
61 120.9 141.1 211.7#  
98 49.3 48.0 72.0



#15  
MTBE  
Concen: 0.17 ug/L  
RT: 8.74 min Scan# 522  
Delta R.T. 0.00 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

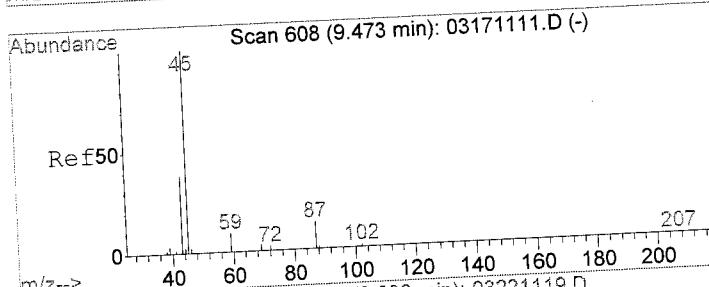
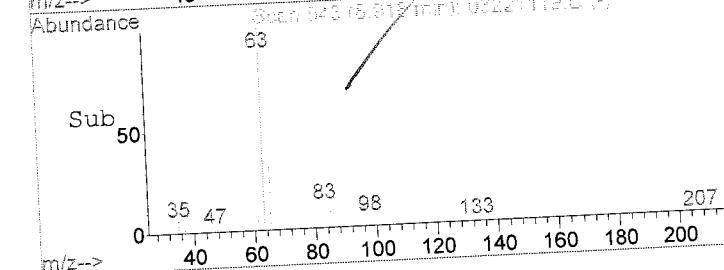
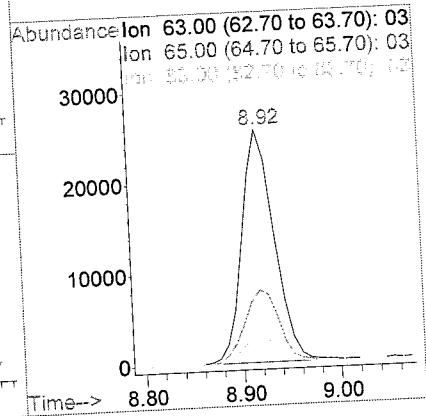
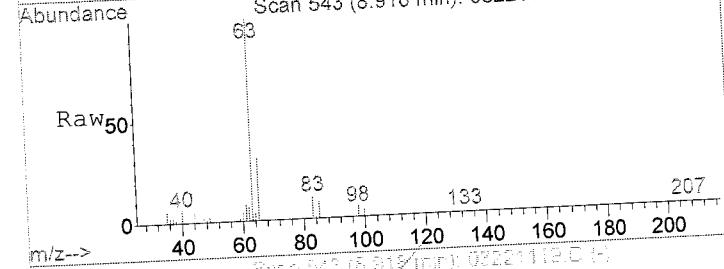
Tgt Ion: 73 Resp: 1563  
Ion Ratio Lower Upper  
73 100  
57 17.7 20.0 30.0#





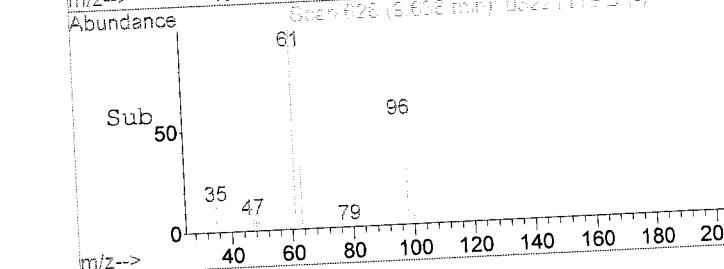
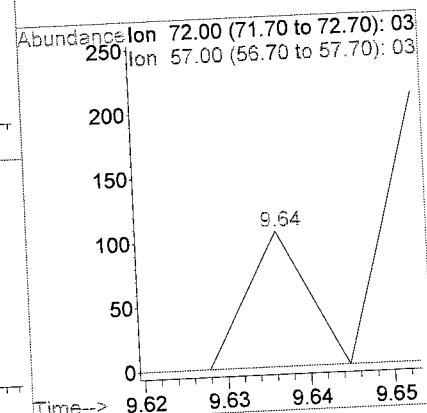
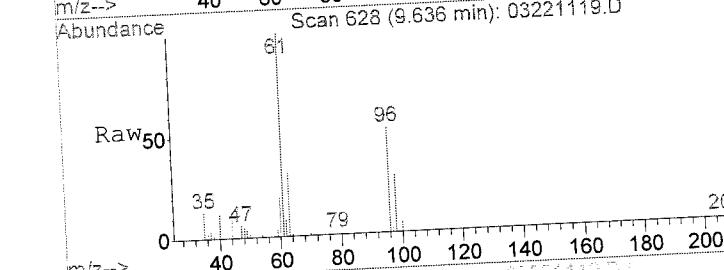
#16  
1,1-Dichloroethane  
Concen: 5.11 ug/L  
RT: 8.92 min Scan# 543  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

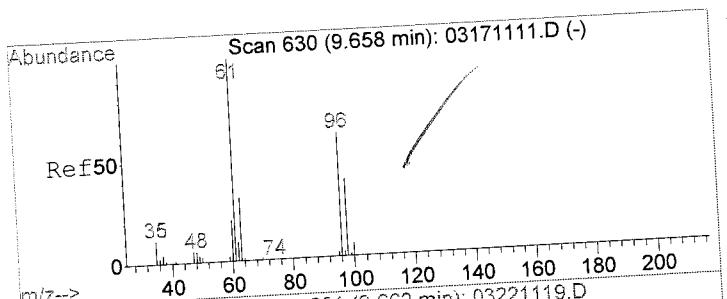
Tgt Ion: 63 Resp: 58907  
Ion Ratio Lower Upper  
63 100  
65 33.2 25.2 37.8  
83 11.7 9.2 13.8



#18  
2-Butanone (MEK)  
Concen: 1.07 ug/L  
RT: 9.64 min Scan# 628  
Delta R.T. 0.16 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

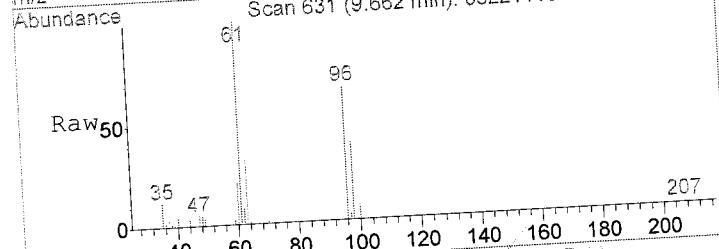
Tgt Ion: 72 Resp: 53  
Ion Ratio Lower Upper  
72 100  
57 0.0 2670.6 4006.0#



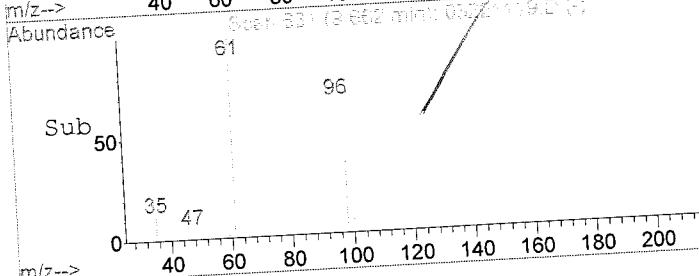
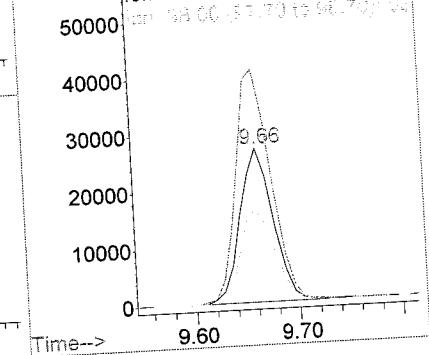


#19  
cis-1,2-Dichloroethene  
Concen: 10.50 ug/L  
RT: 9.66 min Scan# 631  
Delta R.T. 0.00 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

Tgt Ion: 96 Resp: 60140  
Ion Ratio Lower Upper  
96 100  
61 158.9 128.5 192.7  
98 62.9 49.9 74.9

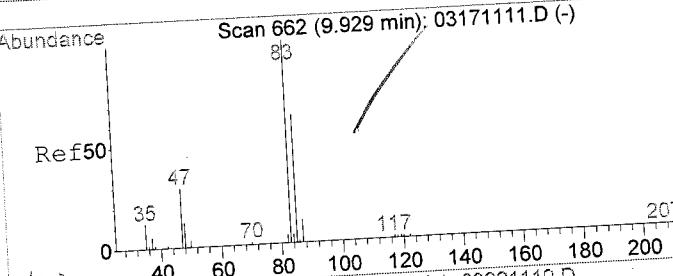


Abundance<ion 96.00 (95.70 to 96.70): 03  
ion 61.00 (60.70 to 61.70): 03  
ion 98.00 (97.70 to 98.70): 03

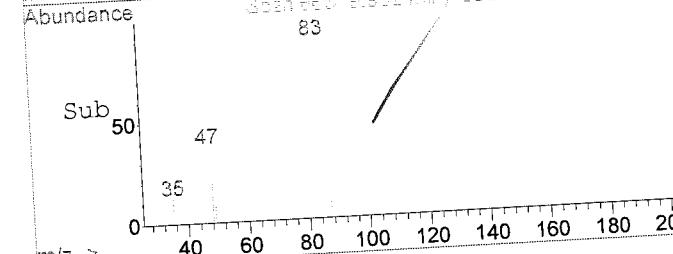
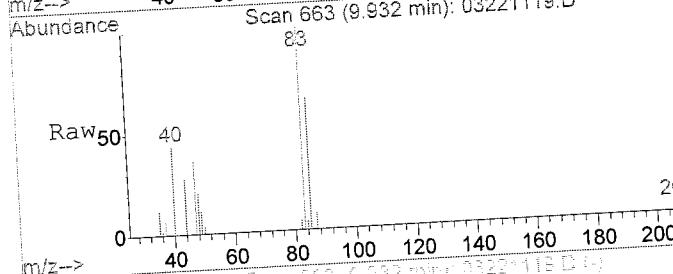
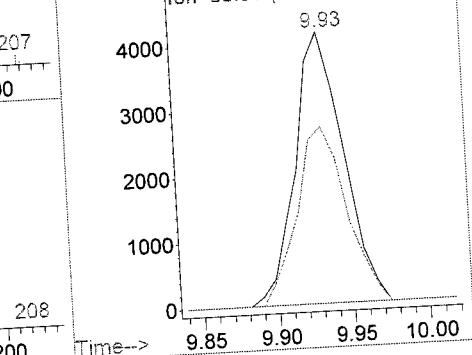


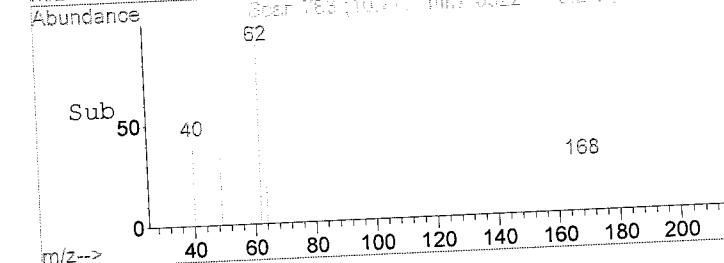
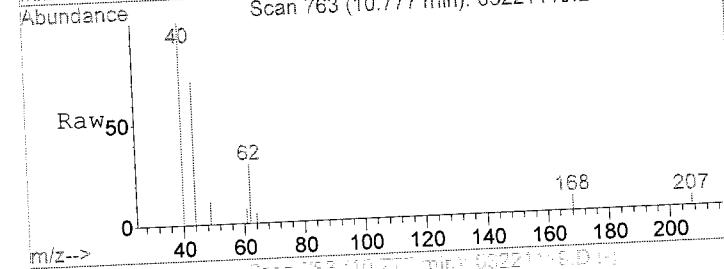
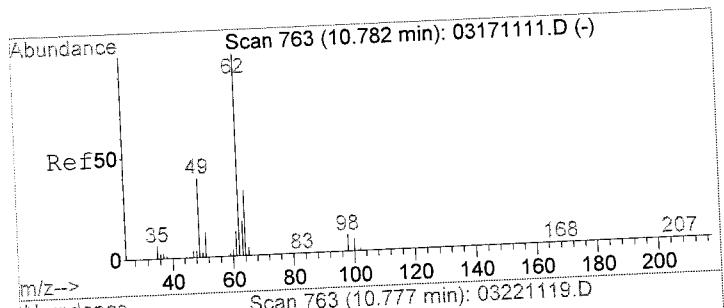
#21  
Chloroform  
Concen: 0.97 ug/L  
RT: 9.93 min Scan# 663  
Delta R.T. 0.00 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

Tgt Ion: 83 Resp: 9206  
Ion Ratio Lower Upper  
83 100  
85 67.1 51.6 77.4



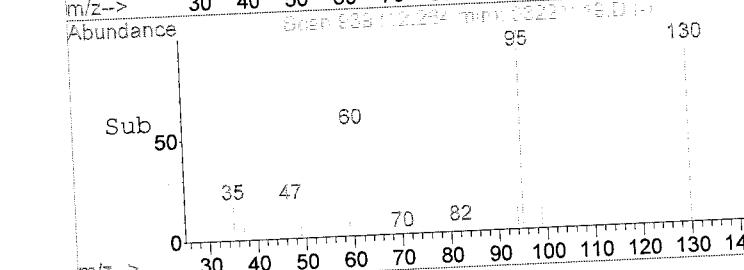
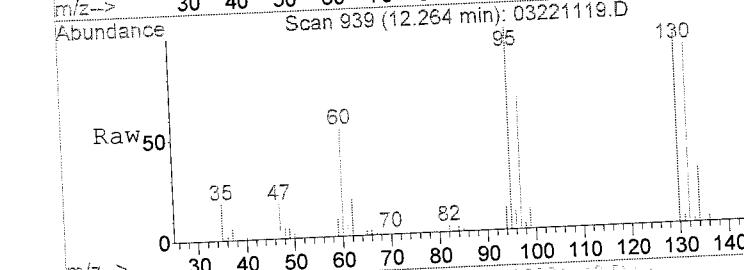
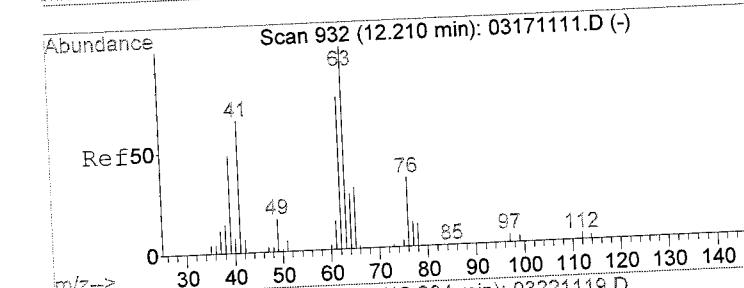
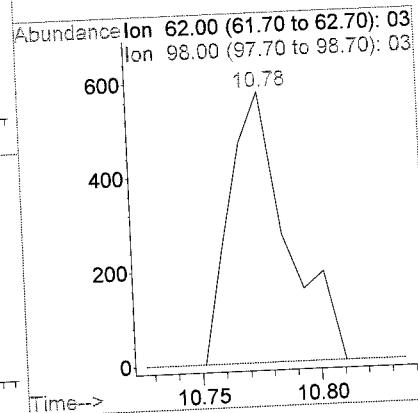
Abundance<ion 83.00 (82.70 to 83.70): 03  
ion 85.00 (84.70 to 85.70): 03





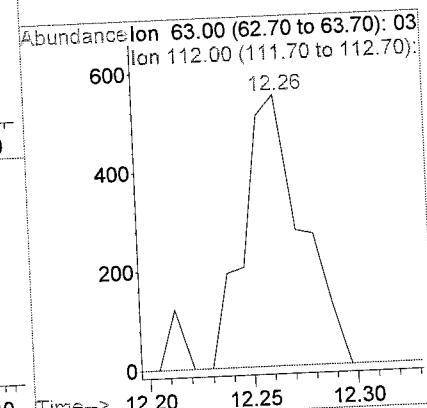
#24  
 1,2-Dichloroethane  
 Concen: 0.17 ug/L  
 RT: 10.78 min Scan# 763  
 Delta R.T. -0.01 min  
 Lab File: 03221119.D  
 Acq: 22 Mar 2011 3:43 pm

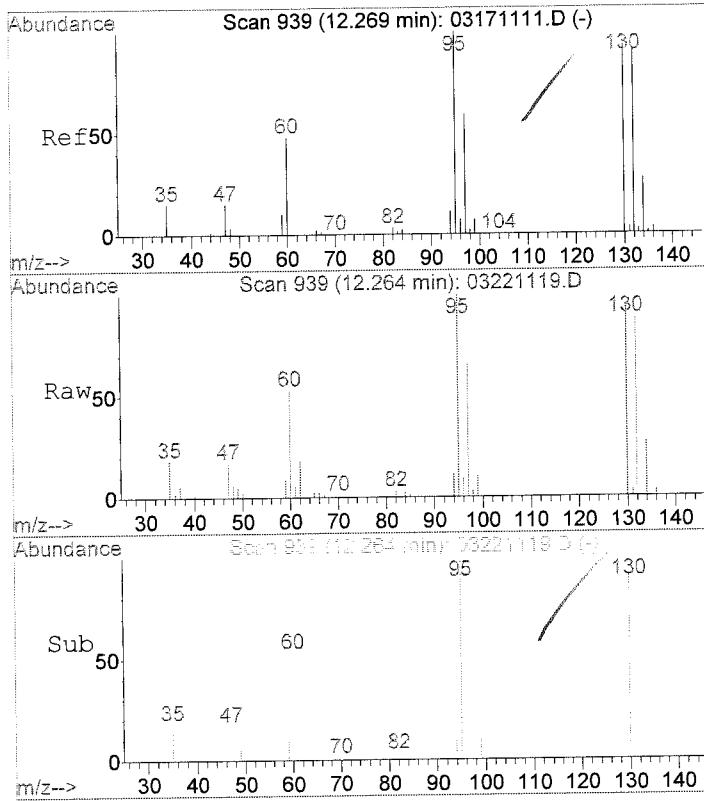
Tgt Ion: 62 Resp: 964  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 7.0 10.6#



#31  
 1,2-Dichloropropane  
 Concen: 0.18 ug/L  
 RT: 12.26 min Scan# 939  
 Delta R.T. 0.05 min  
 Lab File: 03221119.D  
 Acq: 22 Mar 2011 3:43 pm

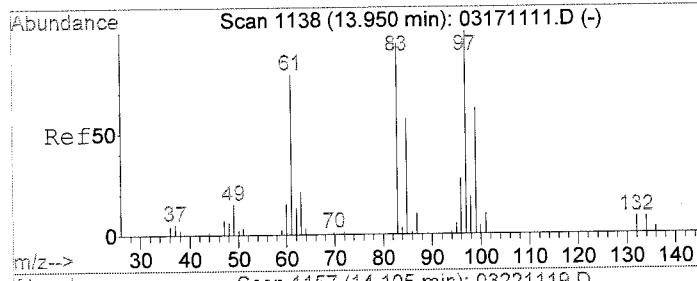
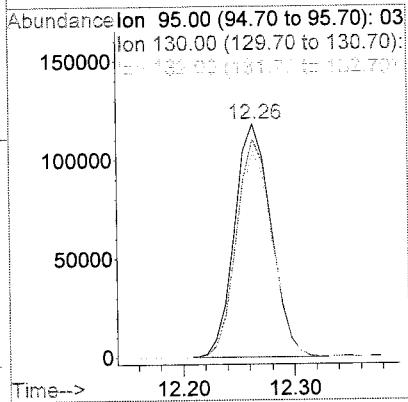
Tgt Ion: 63 Resp: 1067  
 Ion Ratio Lower Upper  
 63 100  
 112 0.0 2.7 4.1#





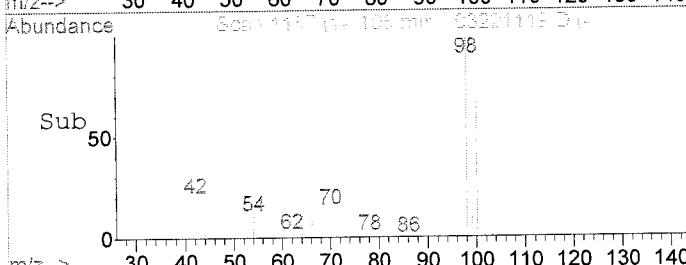
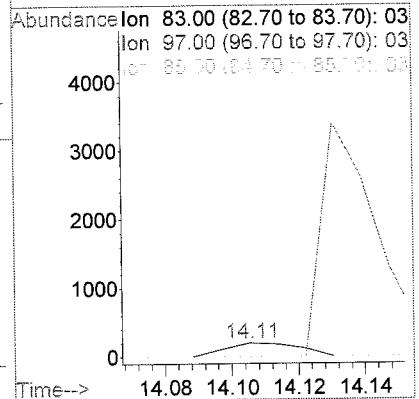
#32  
Trichloroethene  
Concen: 49.85 ug/L  
RT: 12.26 min Scan# 939  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

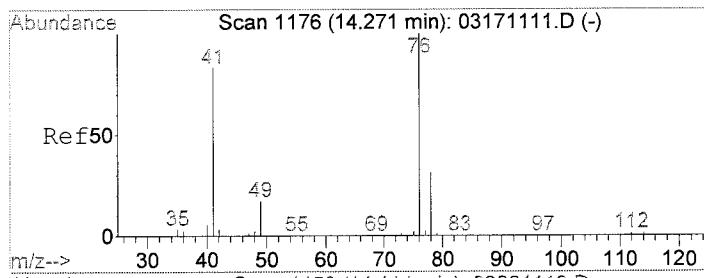
Tgt Ion: 95 Resp: 266454  
Ion Ratio Lower Upper  
95 100  
130 91.8 74.2 111.4  
132 86.6 70.8 106.2



#38  
1,1,2-Trichloroethane  
Concen: 0.11 ug/L  
RT: 14.11 min Scan# 1157  
Delta R.T. 0.16 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

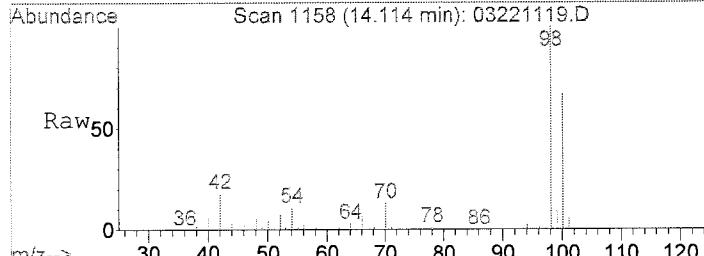
Tgt Ion: 83 Resp: 302  
Ion Ratio Lower Upper  
83 100  
97 1337.7 83.0 124.6#  
85 0.0 51.3 76.9#



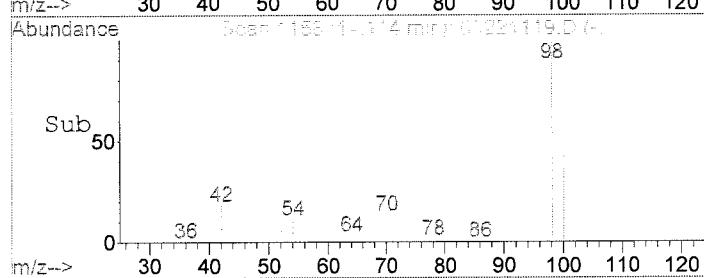


#42  
1,3-Dichloropropane  
Concen: 0.64 ug/L  
RT: 14.11 min Scan# 1158  
Delta R.T. -0.16 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm

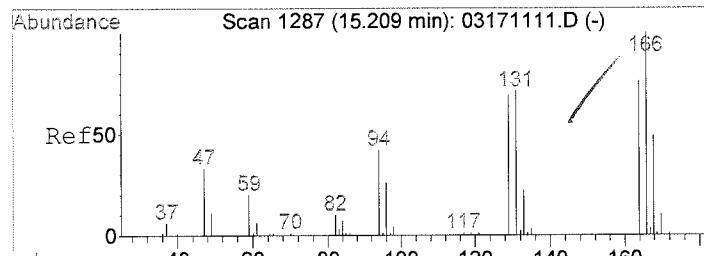
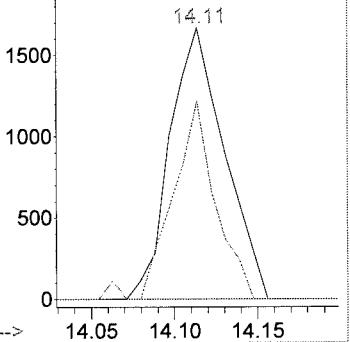
*Wk*



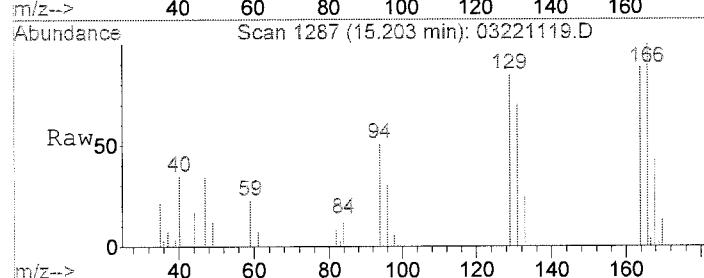
Tgt Ion: 76 Resp: 3785  
Ion Ratio Lower Upper  
76 100  
78 55.9 24.6 37.0#



Abundance Ion 76.00 (75.70 to 76.70): 03  
Ion 78.00 (77.70 to 78.70): 03

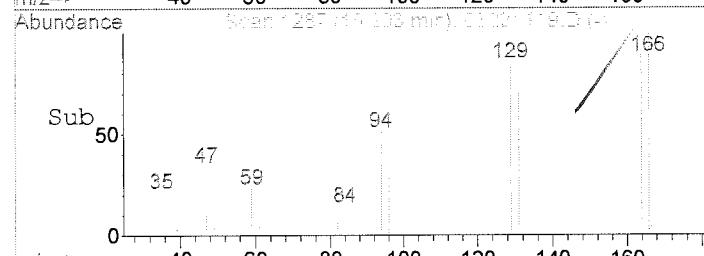
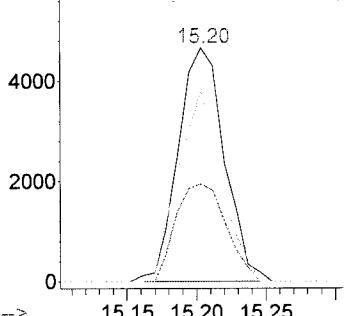


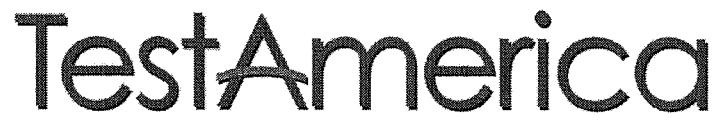
#46  
Tetrachloroethene  
Concen: 2.32 ug/L  
RT: 15.20 min Scan# 1287  
Delta R.T. -0.01 min  
Lab File: 03221119.D  
Acq: 22 Mar 2011 3:43 pm



Tgt Ion: 166 Resp: 10795  
Ion Ratio Lower Upper  
166 100  
168 45.3 37.9 56.9  
129 76.1 59.8 89.8

Abundance Ion 166.00 (165.70 to 166.70):  
Ion 168.00 (167.70 to 168.70):  
Ion 129.00 (128.70 to 129.70):





THE LEADER IN ENVIRONMENTAL TESTING

DIGESTION and/or EXTRACTION

METHOD: EPA 3520C

Work Order:

PUC1113-01

## PREPARATION BENCH SHEET

11C0675

TestAmerica Phoenix

Printed: 3/21/2011 3:06:25PM

## Matrix: Water

'prepared using: N\_GCIMS Semivolatiles - N\_EPA 3520c

Surrogate used: PU01532

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
11C0675-BLK1	QC		03/17/11 17:00	1000	1							100	
11C0675-BS1	QC		03/17/11 17:00	1000	1	PT05700	200					100	
11C0675-BSD1	QC		03/17/11 17:00	1000	1	PT05700	200					100	
PUC0731-02RE	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	From 11C0526 by KA on 03/18/11
PUC1113-01	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC1114-01	D	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC1114-02	D	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC1114-03	D	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC1114-04	D	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC11197-01	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC11197-02	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC11197-03	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC11197-04	E	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	
PUC11197-05	D	N_1,4-Dioxane (SW82)	03/17/11 17:00	1000	1							100	

## Reagents used in Batch

Reagent	Description	Solvent

6
---

181 of 262

Spirking\ssed By \_\_\_\_\_ Date \_\_\_\_\_

3/21/11

Date

Extracts Received By \_\_\_\_\_ Date \_\_\_\_\_

Page 1 of 1

TestAmerica  
Phoenix

Check box if the back of the previous page is used for additional noted, comments, or calculations. The use of other scratch paper is strictly prohibited.

Extraction Date: 3-17-11

LIMS Batch No: BNA 031711A

Liquid/Liquid Extraction Record

Element No.: 1160675

Test Code: 1,4-Dioxane

Analytical Method: 352ULL

Solvent/Lot No.1. DCM/J4550) 2. Final Sol.: DCM/J4550) Na<sub>2</sub>SO<sub>4</sub> Lot #: \_\_\_\_\_

Acid/Base/Lot No.1. 2. 3. \_\_\_\_\_

Surrogate: Mod 8270 Conc. 200 ppm Volume: 100µl Std. ID#: P001532 Exp Date 9-14-11

Spike #1: 1,4-Dioxane Conc. 100 ppm Volume: 200µl Std. ID#: P705700 Exp Date 10-31-13

Spike #2: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Spike #3: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Spike #4: \_\_\_\_\_ Conc. \_\_\_\_\_ Volume: \_\_\_\_\_ Std. ID#: \_\_\_\_\_ Exp Date \_\_\_\_\_

Start Time: 1700 End Time: 1640 3-18-11 Spiked By: JA Spike Witness: KP

K-D'd by: JA E-vap'd by: NA Solvent Ex'd by: NR Brought to V<sub>f</sub> & Vialled by: JR

	Sample #	RE	Sample Frac.	pH <sup>1</sup>	Initial Vol/Wt (mLs/g)	Final Vol. (mLs)	K-D'd (✓)	Evp'd (✓)	Clean Up <sup>2</sup>	Color	Sample linked at:
1	MB	NA	NA	5	1L	1	✓	✓	NA	clear	NA
2	LCS	1	1	5	1L	1	✓	✓	1	clear	
3	LCSD	1	1	5	1L	1	✓	✓	1	clear	
4	MS PUC0731-2	1	E	7	1L	1	✓	✓	1	clear	
5	MSD PUC 1113-1	NA	E	7	1L	1	✓	✓	1	clear	
6	PUC 1114-1	1	D	7	1L	1	✓	✓	1	clear	
7	PUC 1114-2	1	D	7	1L	1	✓	✓	1	clear	
8	PUC 1114-3	1	D	7	1L	1	✓	✓	1	clear	
9	PUC 1114-4	1	D	7	1L	1	✓	✓	1	clear	
10	PUC 1197-1	E	7	1L	1	✓	✓	1	1	clear	
11	PUC 1197-2	E	7	1L	1	✓	✓	1	1	clear	
12	PUC 1197-3	E	7	1L	1	✓	✓	1	1	clear	
13	PUC 1197-4	E	7	1L	1	✓	✓	1	1	clear	
14	PUC 1197-5	1	D	7	1L	1	✓	✓	1	clear	
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

<sup>1</sup> Sample pH / Adjusted pH;

<sup>2</sup> AW is Acid Wash, DW is DCM wash.

a = Acid Fraction, b = base/neutral fraction

X Insufficient Sample for MS/MSD    MS/MSD Designated    MS/MSD Chosen    Sample Container(s) Shaken & Rinsed with Solvent

Sample Extracts located in: Box# \_\_\_\_\_ Row(s) & Numbers \_\_\_\_\_ BNA Freezer X SVOA's Fridge \_\_\_\_\_

Comments: \_\_\_\_\_

182 of 262

Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_



THE LEADER IN ENVIRONMENTAL TESTING

## CALIBRATION DATA

### METHOD

MODIFIED EPA 8270C

DATE: 01/05/11

Work Order: PUC1113-01

Attachment 1

INITIAL CALIBRATION CURVE CHECKLIST

Department: Semivola	Method: Mod. 8270 C	Instrument #: Ccmis 14
Analyst: C. Lauer	Analysis Date: 01-05-11	
Method name saved in the file: D:\PANE\010511.m		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		
2. Did the calibration curve pass the method criteria? Y N		
3. Were any points of the curve removed or replaced? Y N		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? Y N		
If yes, what points were removed or replaced: lowest middle highest		
List of the analytes:		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input checked="" type="checkbox"/> Average Response Factor <input type="checkbox"/> Linear Regression / not forced through zero / simple linear <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration <input type="checkbox"/> Linear Regression / forced through zero <input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero <input type="checkbox"/> Equal weighting <input type="checkbox"/> Inverse of concentration <input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements? Y N		

Review Signatures:	Analyst: C. Lauer	Date: 01-05-11
	Reviewer: Jessica Brumley	Date: 01/05/11



THE LEADER IN ENVIRONMENTAL TESTING

Phoenix

SOP No. PE-QAD-022, Rev. 1

Effective Date: 09/30/2010

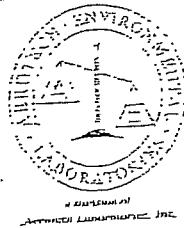
Page No.: 1 of 1

## Attachment 1

## INITIAL CALIBRATION CURVE CHECKLIST

Department: <u>Sentra</u>	Method: <u>MW &amp; SP270C</u>	Instrument #: <u>GCMS14</u>
Analyst: <u>C. Fair</u>	Analysis Date: <u>2/27/11 - 01/05/11</u>	
Method name saved in the file: <u>DINPANE \ 010511.D.M</u>		
1. How many calibration points were used? 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		
2. Did the calibration curve pass the method criteria? Y N		
3. Were any points of the curve removed or replaced? Y N		
If yes, what points were removed or replaced: lowest middle highest		
Why?		
4. Were any individual analyte points removed? Y N		
If yes, what points were removed or replaced: lowest middle highest		
List of the analytes:		
Why?		
5. Circle the calibration model used (you may circle one or more)		
<input type="checkbox"/> Average Response Factor		
<input type="checkbox"/> Linear Regression / not forced through zero / simple linear		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
<input type="checkbox"/> Linear Regression / forced through zero		
<input type="checkbox"/> 2 <sup>nd</sup> Order Regression (Quadratic) / not forced through zero		
<input type="checkbox"/> Equal weighting		
<input type="checkbox"/> Inverse of concentration		
<input type="checkbox"/> Inverse of square of concentration		
6. Did the calibration meet the Good Documentation Practices SOP requirements: Y N		

Review Signatures:	Analyst:	Date:
	Reviewer: <u>Joseph Breckell</u>	Date: <u>03/01/11</u>



Department: Semi-Volatiles

Page 21 of 23

SOP

Number/Revision

03-029.C3

Date issued:

March 2007

Expiration Date:

March 2009

EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS Analysis

NOT TO BE PHOTOCOPIED

EPA 8270C Modified 1,4-Dioxane by Isotope Dilution, Extraction & GC/MS Analysis  
Data Review Checklist (Example)ANALYSIS DATE: 6-05-11

MEETS CRITERIA?

Y/N

1. DFT/PP (50ng) VERIFY MEETS CRITERIA EVERY 12 HOURS  
*✓ 6-05-11*

DIOXANE

Y/N

2. INITIAL CALIBRATION CURVE (MIN. 5 LEVELS) DATE: 01-05-11-W  
- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05  
- CCC 1,4-DICHLOROBENZENE < 30% RSD, 1,4-DIOXANE  $\leq$  20% RSD  
- ALL OTHER COMPOUNDS < 15% RSD OR USE CURVE ( $r^2 > 0.990$ )  
TAILING FACTOR, B/N BENZIDENE: 3.0

Y/N

Y/N

Y/N

Y/N

Y/N

3. INITIAL CALIBRATION VERIFICATION (SEC. SOURCE) ANALYZED

Y/N

4. CONTINUING CALIBRATION CHECK (EVERY 12 HOURS)

Y/N

- SPCC N-NITROSODI-N-PROPYLAMINE MUST MEET MIN. RF 0.05  
- CCC 1,4-DICHLOROBENZENE < 20% D; 1,4-DIOXANE  $\leq$  20%  
- IS 1,4-DCB-d4 AREA -50% TO -100% TO MID-POINT IN I. CAL  
- IS 1,4-DCB-d4 RT  $\pm$  30 SEC. TO MID-POINT IN INITIAL CALIB.  
- TAILING FACTOR,  
B/N BENZIDENE: 3.0

Y/N

Y/N

Y/N

Y/N

Y/N

Y/N

5. METHOD BLANK

Y/N

- ANALYZE ONE PER BATCH (< 20 SAMPLES)  
- 1,4-DIOXANE MUST BE < REPORTING LIMIT

Y/N

VR

6. LCS/LCSD WITHIN LIMITS

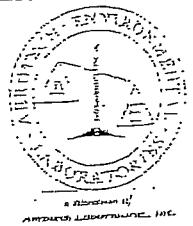
Y/N

- MUST BE ANALYZED PER 20 SAMPLES/BATCH  
- % RECOVERY WITHIN 80 - 120% LIMITS  
- RPD WITHIN LIMITS ( $\leq$  25 RPD)

Y/N

Y/N

Y/N



Department: Semi-Volatiles

Page 21 of 22

SOP  
Number/Revision  
05-020.03Title:  
EPA 8270C Modified  
1,4-Dioxane By Isotope Dilution,  
Extraction and GC-MS AnalysisDate issued:  
March 2007Expiration Date:  
March 2008

NOT TO BE PHOTOCOPIED

## 7. MS/MSD

- MUST BE ANALYZED PER 20 SAMPLES/BATCH
- % RECOVERY WITHIN 70-130% LIMITS
- RPD WITHIN LIMITS ( $\leq 25$  RPD)

Y/N

Y/N

Y/N

## 8. SAMPLES

- EXTRACTED WITHIN 7 DAYS OF SAMPLING
- ANALYZED WITHIN 40 DAYS OF EXTRACTION
- IS 1,4-DCE-d4 RT  $\pm$  30 SECS AND IS AREA  $-50\%$  TD  $\div 100\%$  TD
- CONT. CAL
- SURROGATE RECOVERIES WITHIN LIMITS

Y/N

Y/N

Y/N

Y/N

## 9. TUNE INJECTED WITHIN 12hr TIME PERIOD

(Y/N)

## COMMENTS

ANALYST:

A

DATE:

1-5-11

REVIEWER:

DATE:

## Response Factor Report GCMS14

Method Path : D:\msdchem\14\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M ✓  
 Title : GCMS14 / MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
1) I 1,4-Dioxane-d8										ISTD	
2) C 1,4-Dioxane	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018	4.12
3) I 1,4-Dichlorobenzene										ISTD	
4) C* 1,4-Dichlorobenzene	1.651	1.656	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644	4.43
5) P N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195	5.28
6) S Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792	4.99

(#) = Out of Range

C 1.5-11

100511

## Response Factor Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Calibration Files  
 1 =01051106.D 2 =01051107.D 3 =01051108.D 4 =01051109.D 5 =01051110.D 6 =01051111.D 7 =01051112.D 8 =01051113.D  
 9 =01051114.D

Compound	1	2	3	4	5	6	7	8	9	Avg	%RSD
										ISTD	
1) I	1.4-Dioxane-d8	0.973	1.050	1.052	1.067	1.050	1.011	0.998	1.018	0.940	1.018
2) C	1,4-Dioxane										4.12
3) I	1,4-Dichlorobenzene									ISTD	
4) C*	1,4-Dichlorobenzene	1.651	1.666	1.745	1.716	1.666	1.657	1.608	1.594	1.496	1.644
5) P	N-Nitrosodi-n...	1.075	1.120	1.247	1.256	1.255	1.224	1.213	1.195	1.171	1.195
6) S	Nitrobenzene-d5	1.669	1.711	1.924	1.883	1.869	1.811	1.804	1.761	1.697	1.792

(#) = Out of Range

Update  
on 2-28-11

189 of 262

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M /  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D
10	CC	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	1/05/11
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011	
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011	
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011	
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011	
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011	
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011	
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011	
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011	
10	CC	Jan 05 13:29 2011	Jan 05 12:20 2011	

010511.M Wed Jan 05 13:33:03 2011

## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051106.D
2	2	1	20	D:\msdchem\1\GCMS14\DATA\010511\01051107.D
3	3	2	20	D:\msdchem\1\GCMS14\DATA\010511\01051108.D
4	4	4	20	D:\msdchem\1\GCMS14\DATA\010511\01051109.D
5	5	10	20	D:\msdchem\1\GCMS14\DATA\010511\01051110.D
6	6	20	20	D:\msdchem\1\GCMS14\DATA\010511\01051111.D
7	7	30	20	D:\msdchem\1\GCMS14\DATA\010511\01051112.D
8	8	40	20	D:\msdchem\1\GCMS14\DATA\010511\01051113.D
9	9	100	20	D:\msdchem\1\GCMS14\DATA\010511\01051114.D
10	CC	10	20	R:\022511\02251108.D <i>use to update due to pt diff</i>

#	ID	Update Time	Quant Time	Acquisition Time	
1	1	Jan 05 13:28 2011	Jan 05 11:25 2011	10:51 2011	<i>ca</i>
2	2	Jan 05 13:28 2011	Jan 05 11:44 2011		<i>2/28/11</i>
3	3	Jan 05 13:28 2011	Jan 05 11:54 2011		
4	4	Jan 05 13:28 2011	Jan 05 12:19 2011		
5	5	Jan 05 13:28 2011	Jan 05 12:20 2011		
6	6	Jan 05 13:28 2011	Jan 05 12:43 2011		
7	7	Jan 05 13:28 2011	Jan 05 12:57 2011		
8	8	Jan 05 13:28 2011	Jan 05 13:09 2011		
9	9	Jan 05 13:28 2011	Jan 05 13:26 2011		
10	CC	Feb 28 10:27 2011	Feb 28 10:27 2011	25 Feb 2011 6:23 pm	✓

010511D.M Mon Feb 28 10:59:27 2011

*191 of 262*

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Wed Jan 05 13:29:49 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.975	1.000	A	1	A	B
2 C	1,4-Dioxane	88	3.028	1.018	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.092	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.104	1.002	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.422	1.054	A	1	A	B
6 S	Nitrobenzene-d5	82	6.557	1.076	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. &amp; Q Q = Qvalue L = Largest A = All

010511.M Wed Jan 05 13:33:14 2011

Sample Name 10ug/mL PU00063  
Data File Name 01051110.D  
Data File Path D:\msdchem\1\GCMS14\DATA\010511\  
Operator CL  
Date Acquired 1/5/2011 12:12  
Misc Info 1,4-DIOXANE

Instrument Name	CCV Response	ICAL Response	0.5X	2X	PASS/FAIL
GCMS14	10ug/mL PU00063 01051110.D D:\msdchem\1\GCMS14\DATA\010511\ DIOX010511.m				
Internal Standard 1,4-Dichlorobenzene-d4	243008	243008	121504	486016	PASS

Internal Standard  
1,4-Dichlorobenzene-d4 RT -0.5min +0.5min  
6.09 6.09 5.59 6.59 PASS

update

or 1-5-11

Sample Name 10ug/mL PU00063  
 Data File Name 01051110.D  
 Data File Path D:\msdchem\1\GCMS14\DATA\010511  
 Operator CL  
 Date Acquired 1/5/2011 12:12  
 Misc Info 1,4-DIOXANE  
 Instrument Name GCMS14

NAME	RT	10ug/mL PU00063 01051110.D D:\msdchem\1\GCMS14\DATA\010511\mid-RT				
		CCV RRT	010511.M	AGREE	AGREE	PASS/FAIL
		Value	-0.06	0.06		
		(Target/IS)				
IS 1,4-Dioxane-d8	2.975 ✓	1.0178 ✓	1.0178 ~	0.9578 ✓	1.0778 < PASS	
1,4-Dioxane	3.028 ✓					
IS 1,4-Dichlorobenzene-d4	6.092 ✓	1.0019 ✓	1.0019 ~	0.9419 ✓	1.0619 < PASS	
1,4-Dichlorobenzene	6.104 ✓					
N-Nitrosodi-n-propylamine	6.422 ✓	1.0541 ✓	1.0541 ~	0.9941 ✓	1.1141 < PASS	
Nitrobenzene-d5	6.557 ✓	1.0763 ✓	1.0763 ~	1.0163 ✓	1.1363 < PASS	

Update only.  
 Added in Revised  
 Review checklist for  
 1,4-Dioxane

03-09-11.

30911

194 of 262

TestAmerica  
Phoenix

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\msdchem\1\GCMS14\sequence\010511.S

Comment:

Operator: CL

Data Path: D:\MSDCHEM\1\GCMS14\DATA\010511\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway

( ) Reprocessing Only ( ) Don't Inject

Line		Sample Name/Misc Info
1)	Sample	1 01051101 DB5MS14 DCM
2)	Sample	2 01051102 DB5MS14 DCM
3)	Sample	3 01051103 DB5MS14 25ng tune pu00017
4)	Sample	4 01051104 DB5MS14 25ng TUNE PU00017
5)	Sample	5 01051105 DIOXANE BLANK
6)	Sample	6 01051106 DIOXANE 0.5ug/mL PU00059
7)	Sample	7 01051107 DIOXANE 1.0ug/mL PU00060
8)	Sample	8 01051108 DIOXANE 2.0ug/mL PU00061
9)	Sample	9 01051109 DIOXANE 4.0ug/mL PU00062
10)	Sample	10 01051110 DIOXANE 10ug/mL PU00063
11)	Sample	11 01051111 DIOXANE 20ug/mL PU00064
12)	Sample	12 01051112 DIOXANE 30ug/mL PU00065
13)	Sample	13 01051113 DIOXANE 40ug/mL PU00066
14)	Sample	14 01051114 DIOXANE 100ug/mL PU0067
15)	Sample	15 01051115 DIOXANE QCS10ug/mL PU00068
16)	Sample	1 01051116 DIOXANE 10ug/mL PU00063ccv PCM
17)	Sample	2 01051117 DIOXANE 10ug/mL PU00063ccv
18)	Sample	3 01051118 DIOXANE 11A0067-BLK1
19)	Sample	4 01051119 DIOXANE PTL1256-03RE1
20)	Sample	5 01051120 DIOXANE PTL1256-04RE1
21)	Sample	6 01051121 DIOXANE PTL1256-06RE1
22)	Sample	7 01051122 DIOXANE PTL1256-07RE1
23)	Sample	8 01051123 DIOXANE PTL1262-01RE1
24)	Sample	9 01051124 DIOXANE PTL1262-02RE1
25)	Sample	10 01051125 DIOXANE PTL1256-10
26)	Sample	11 01051126 DIOXANE PTL1262-01
27)	Sample	12 01051127 DIOXANE PTL1262-02

Sequence Reviewed By: a Date: 1-6-11

**195 of 262**

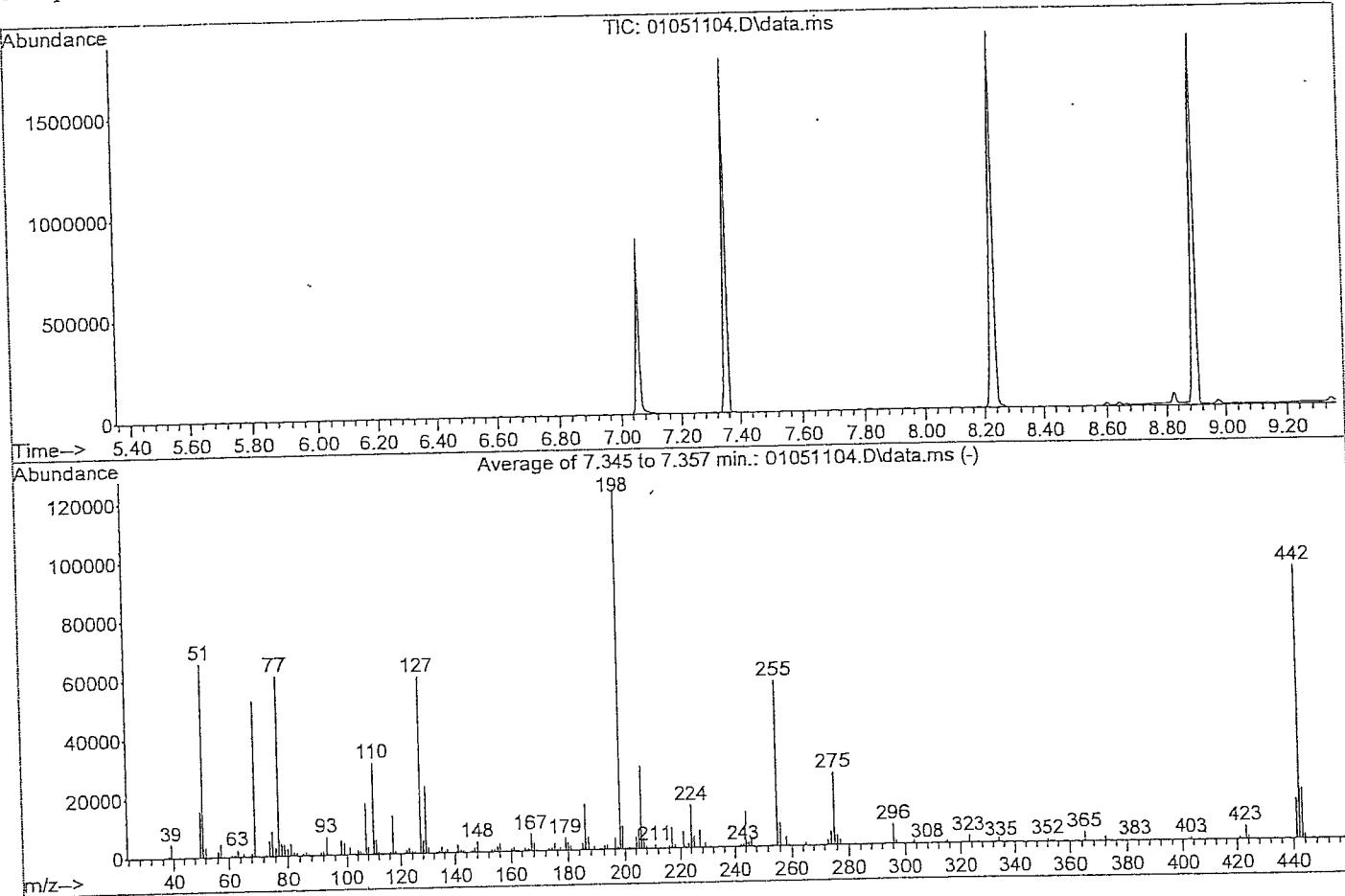
Date Analyzed: 1-6-11 Analyst: a Date Run: 1-5-11

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051104.D  
 Acq On : 5 Jan 2011 10:19 am  
 Operator : CL  
 Sample : 25ng TUNE PU00017  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA.:ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Fri Sep 10 17:23:33 2010



AutoFind: Scans 963, 964, 965; Background Corrected with Scan 958

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	65567	PASS
68	69	0.00	2	1.8	948	PASS
69	198	0.00	100	43.2	52531	PASS
70	69	0.00	2	0.4	221	PASS
127	198	40	60	49.2	59789	PASS
197	198	0.00	1	0.7	889	PASS
198	198	100	100	100.0	121514	PASS
199	198	5	9	6.5	7948	PASS
275	198	10	30	20.3	24613	PASS
365	198	1	100	2.6	3102	PASS
441	443	0.01	100	78.5	13579	PASS
442	198	40	100	76.1	92525	PASS
443	442	17	23	18.7	17299	PASS

196 of 262

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051104.D

Acq On : 5 Jan 2011 10:19 am

Operator : CL

Sample : 25ng TUNE PU00017

Misc :

ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 05 11:46:05 2011

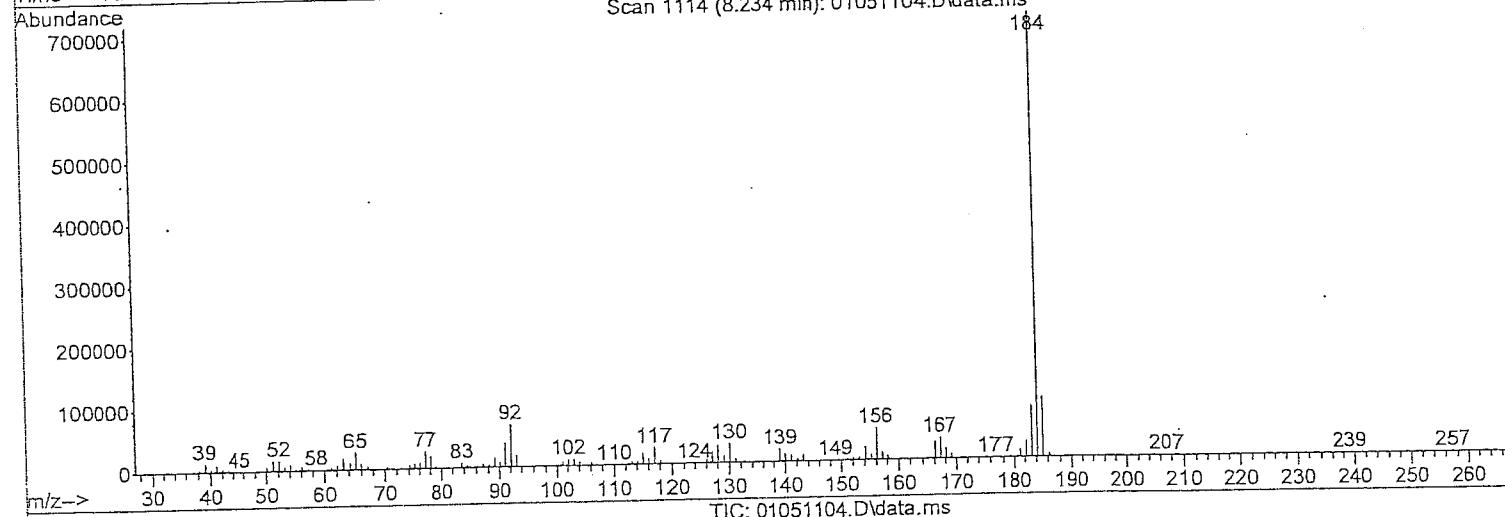
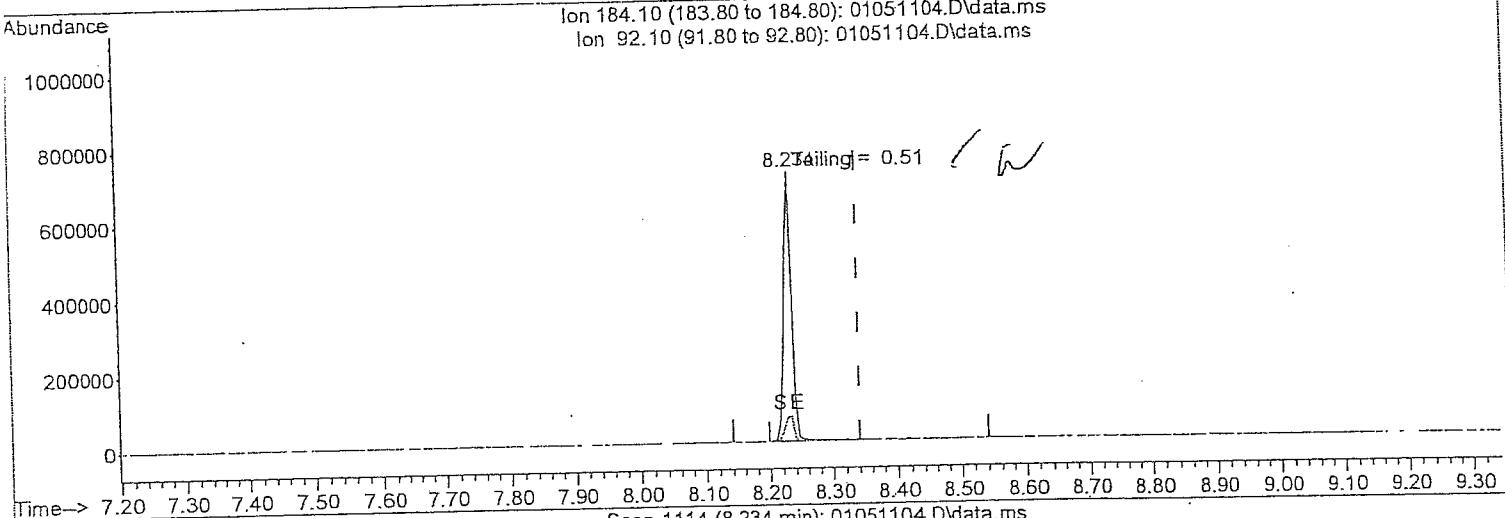
Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M

Quant Title : DFTPP, TAILING EVA.:ACID<5.0, BN<3.0, DEG.<=20%

QLast Update : Fri Sep 10 17:23:33 2010

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D

Ion 184.10 (183.80 to 184.80): 01051104.D\data.ms  
Ion 92.10 (91.80 to 92.80): 01051104.D\data.ms



(2) Benzidine

8.234min (-0.106) 7.68

response 603050

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.42
0.00	0.00	0.00
0.00	0.00	0.00

197 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051105.D

Acq On : 5 Jan 2011 10:44 am

Operator : CL

Sample : BLANK

Misc : 1,4-DIOXANE

ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 05 13:45:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.969	96	300515	20.00	ug/mL	0.00
3) 1,4-Dichlorobenzene-d4	6.092	152	231052	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Target Compounds						
2) 1,4-Dioxane	2.999	88	49	0.00	ug/mL#	1
4) 1,4-Dichlorobenzene	6.092	146	306	0.01	ug/mL#	1

(#= qualifier out of range (m)= manual integration (+)= signals summed

01.5.11

198 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051105.D

Acq On : 5 Jan 2011 10:44 am

Operator : CL

Sample : BLANK

Misc : 1,4-DIOXANE

ALS Vial : 5 Sample Multiplier: 1

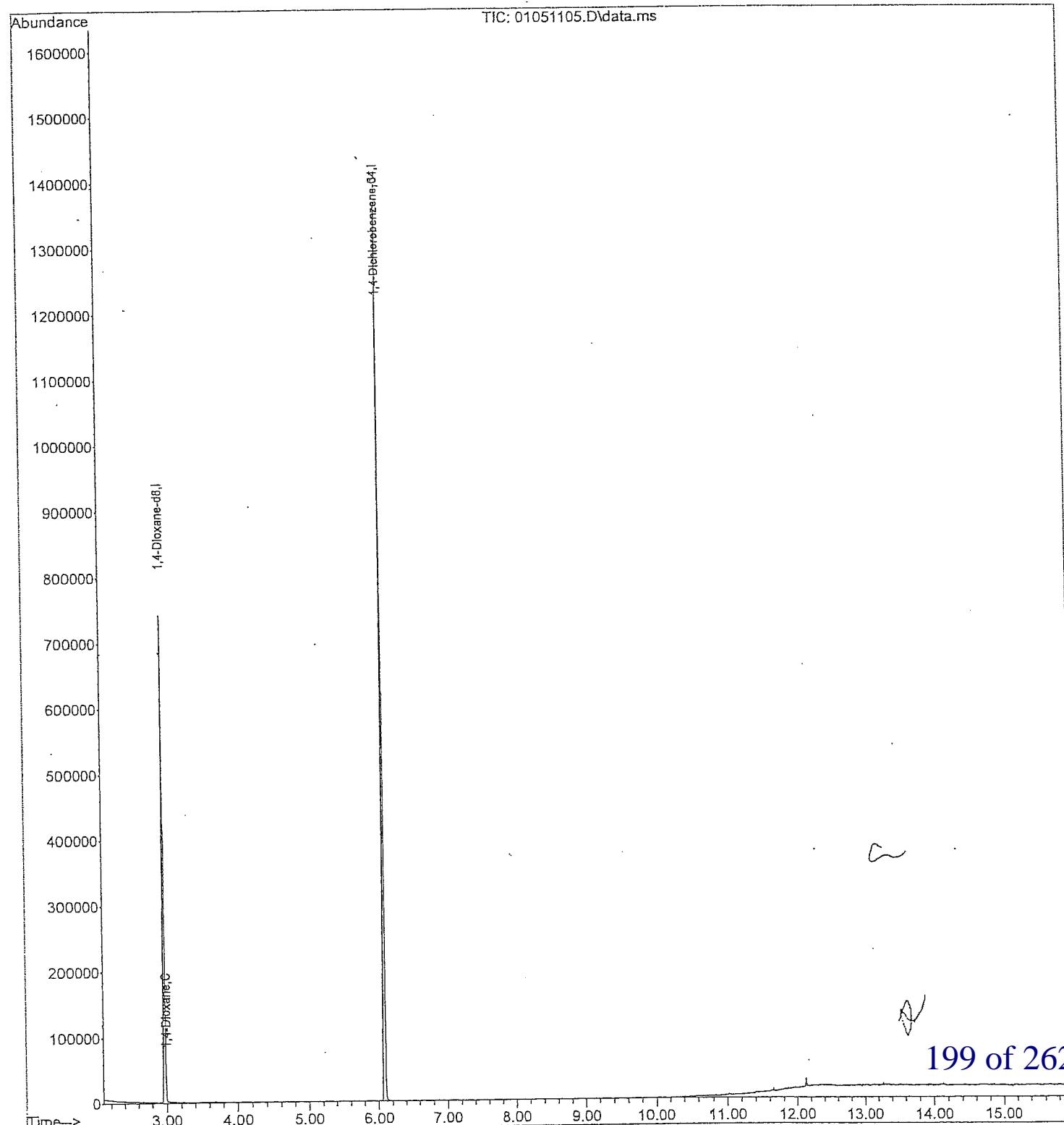
Quant Time: Jan 05 13:45:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051105.D

Acq On : 5 Jan 2011 10:44 am

Operator : CL

Sample : BLANK

Misc : 1, 4-DIOXANE

ALS Vial : 5 Sample Multiplier: 1

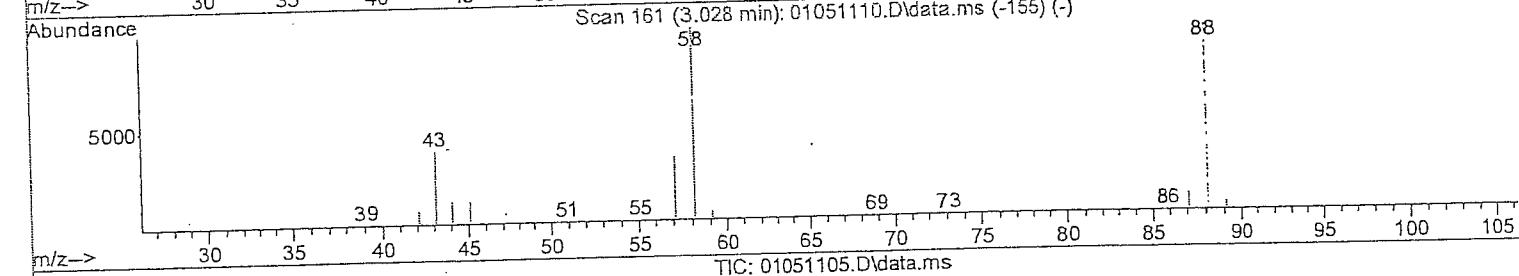
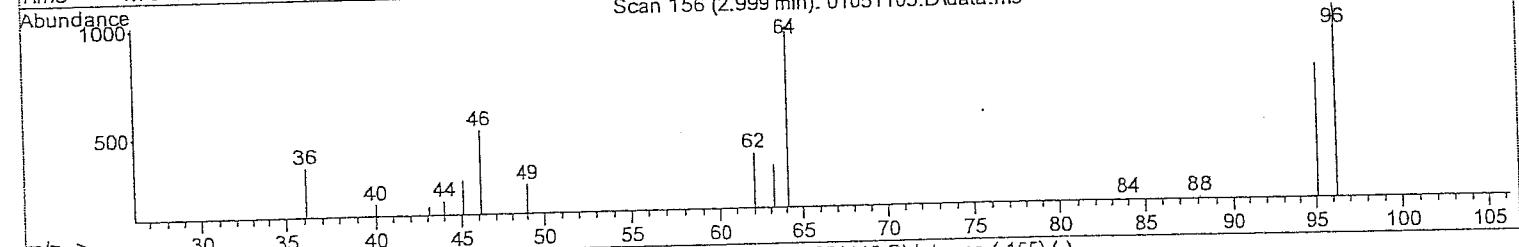
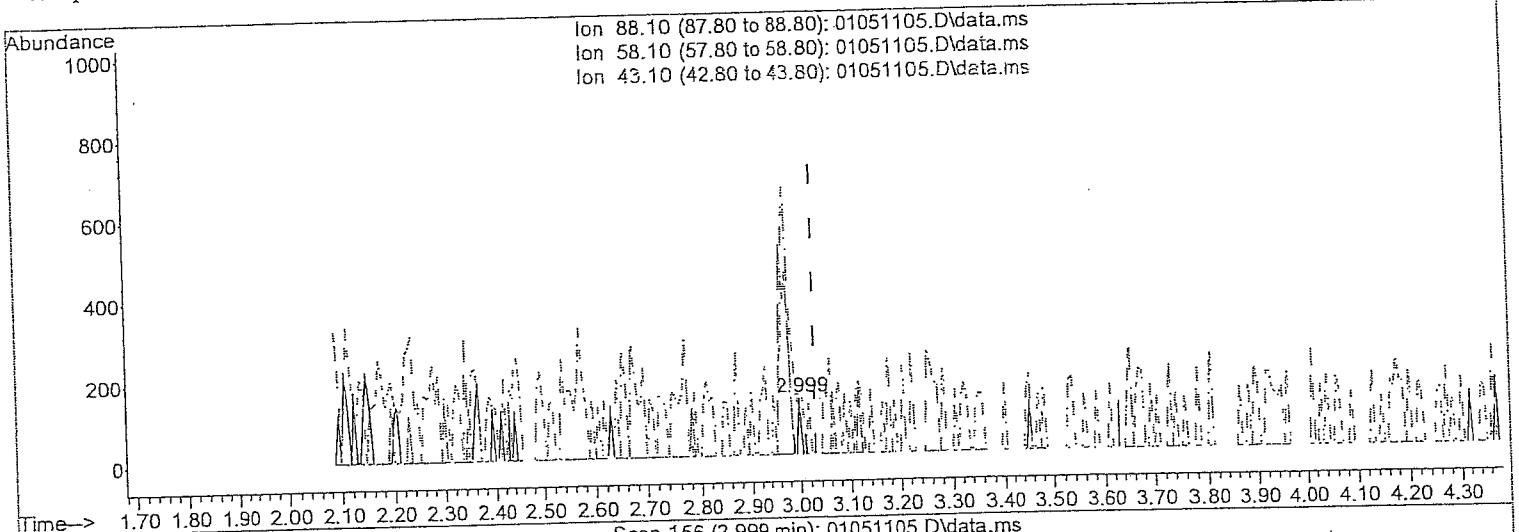
Quant Time: Jan 05 13:45:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.999min (-0.029) 0.00ug/mL

response 49

Ion	Exp%	Act%
88.10	100	100
58.10	97.60	1263.27#
43.10	39.30	2171.43#
0.00	0.00	0.00

2.999min (-0.029)  
 0.00ug/mL

1/21/2011  
 200 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1,4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.963	96	/318261	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	240601	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	20080	0.62	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.016	88	7745	0.48	ug/mL	96
4) 1,4-Dichlorobenzene	6.104	146	19858	0.51	ug/mL	87
5) N-Nitrosodi-n-propylamine	6.422	70	12932	0.61	ug/mL	98

(##) = qualifier out of range (m) = manual integration (+) = signals summed

201 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051106.D

Acq On : 5 Jan 2011 11:10 am

Operator : CL

Sample : 0.5ug/mL PU00059

Misc : 1, 4-DIOXANE

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 05 11:25:57 2011

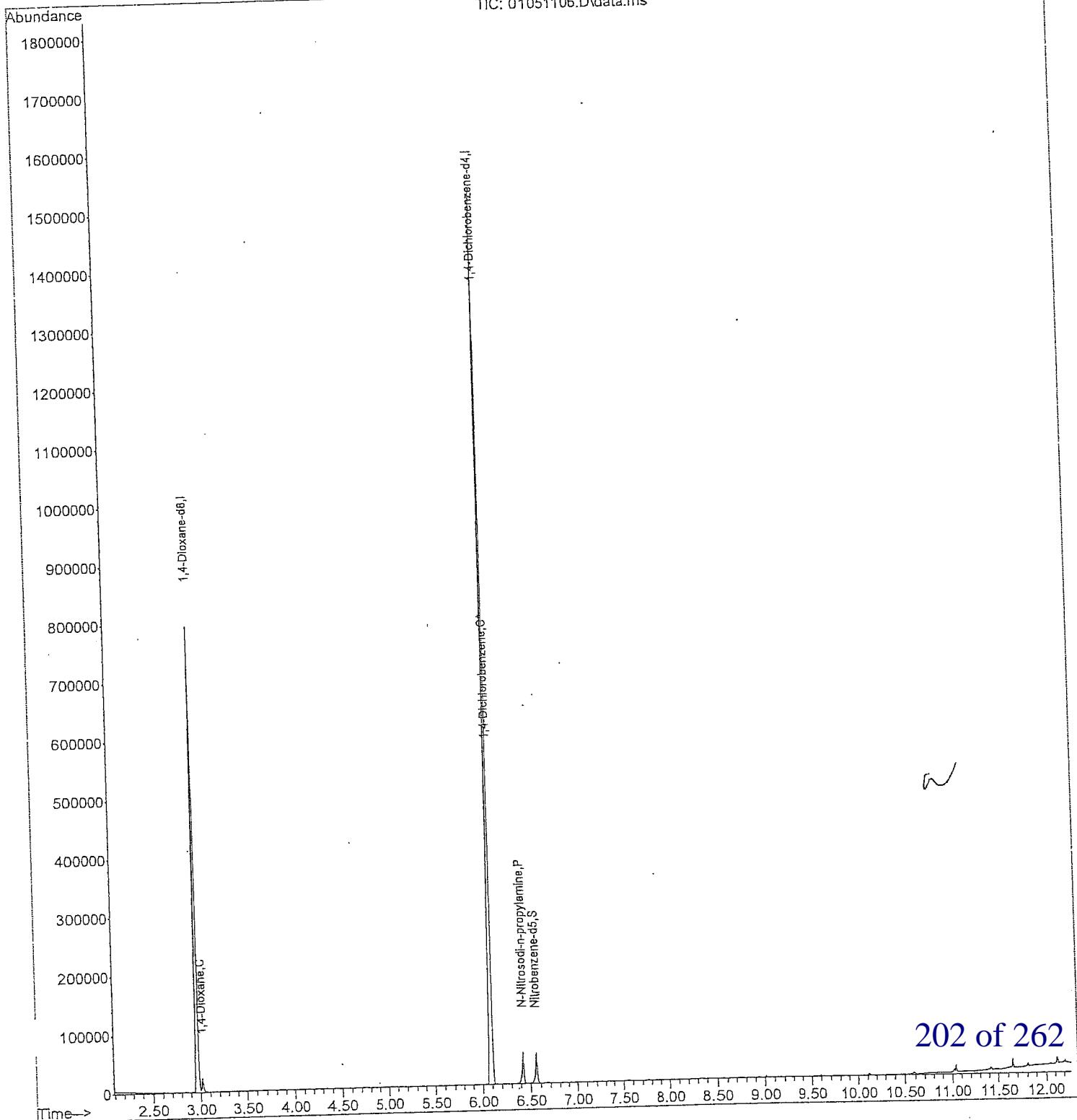
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

TIC: 01051106.D\data.ms



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511

Data File : 01051107.D

Acq On : 5 Jan 2011 11:32 am

Operator : CL

Sample : 1.0ug/mL PU00060

Misc : 1,4-DIOXANE

ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 05 11:44:38 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.969	96	283387	20.00	ug/mL	0.02
3) 1,4-Dichlorobenzene-d4	6.092	152	213017	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	36439	1.28	ug/mL	0.00
Target Compounds						
2) 1,4-Dioxane	3.022	88	14877	1.04	ug/mL	99
4) 1,4-Dichlorobenzene	6.104	146	35480	1.03	ug/mL	95
5) N-Nitrosodi-n-propylamine	6.422	70	23862	1.28	ug/mL	96

(##) = qualifier out of range (m) = manual integration (+) = signals summed

203 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051107.D

Acq On : 5 Jan 2011 11:32 am

Operator : CL

Sample : 1.0ug/mL PU00060

Misc : 1, 4-DIOXANE

ALS Vial : 7 Sample Multiplier: 1

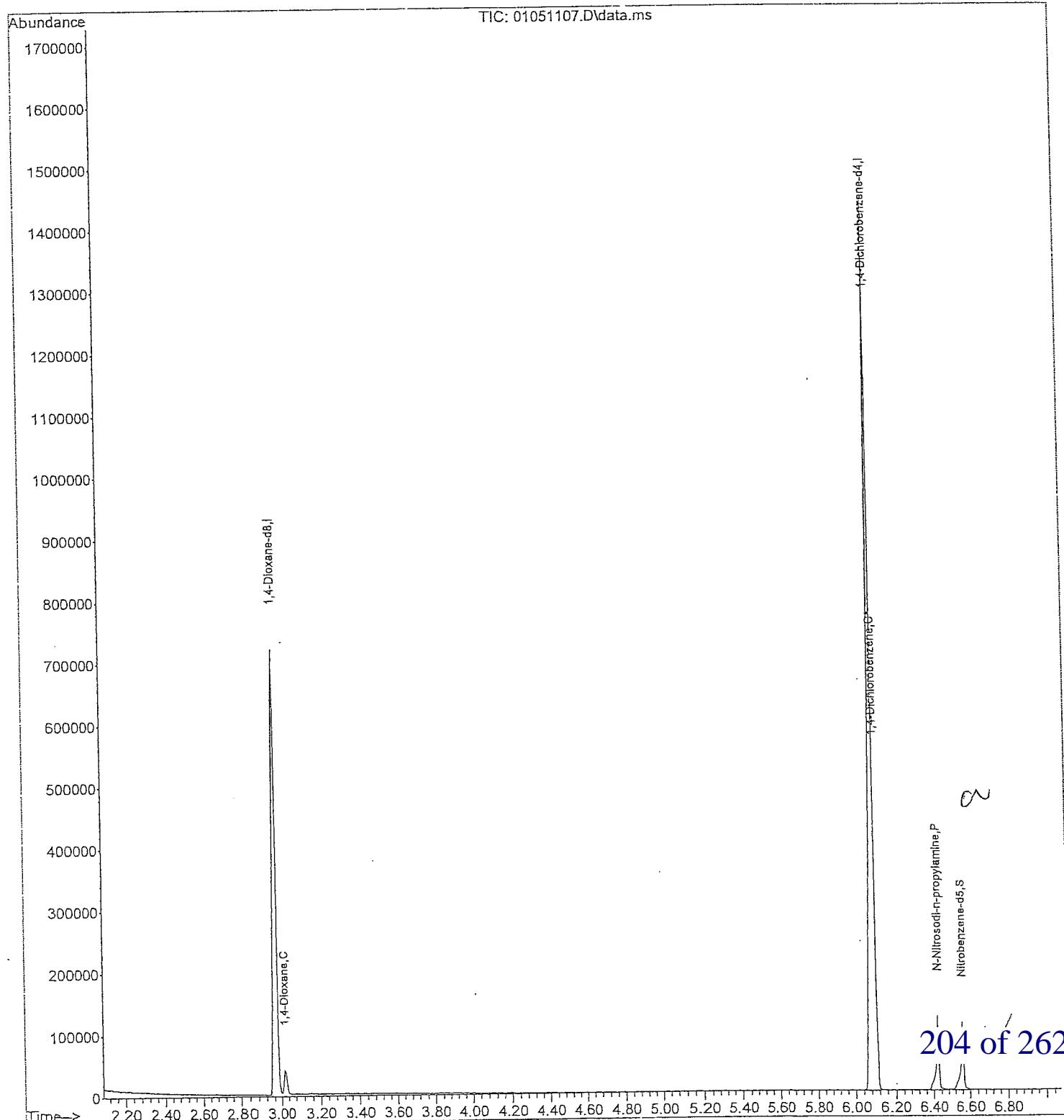
Quant Time: Jan 05 11:44:38 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1, 4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	323796	20. 00	ug/mL	0. 03
3) 1, 4-Dichlorobenzene-d4	6. 087	152	240424	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	92526	2. 87	ug/mL	0. 00
Target Compounds				Qvalue		
2) 1, 4-Dioxane	3. 022	88	34074	2. 09	ug/mL	99
4) 1, 4-Dichlorobenzene	6. 104	146	83920	2. 15	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 416	70	59969	2. 84	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

al. 5/1

205 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051108.D

Acq On : 5 Jan 2011 11:46 am

Operator : CL

Sample : 2.0ug/mL PU00061

Misc : 1, 4-DIOXANE

ALS Vial : 8 Sample Multiplier: 1

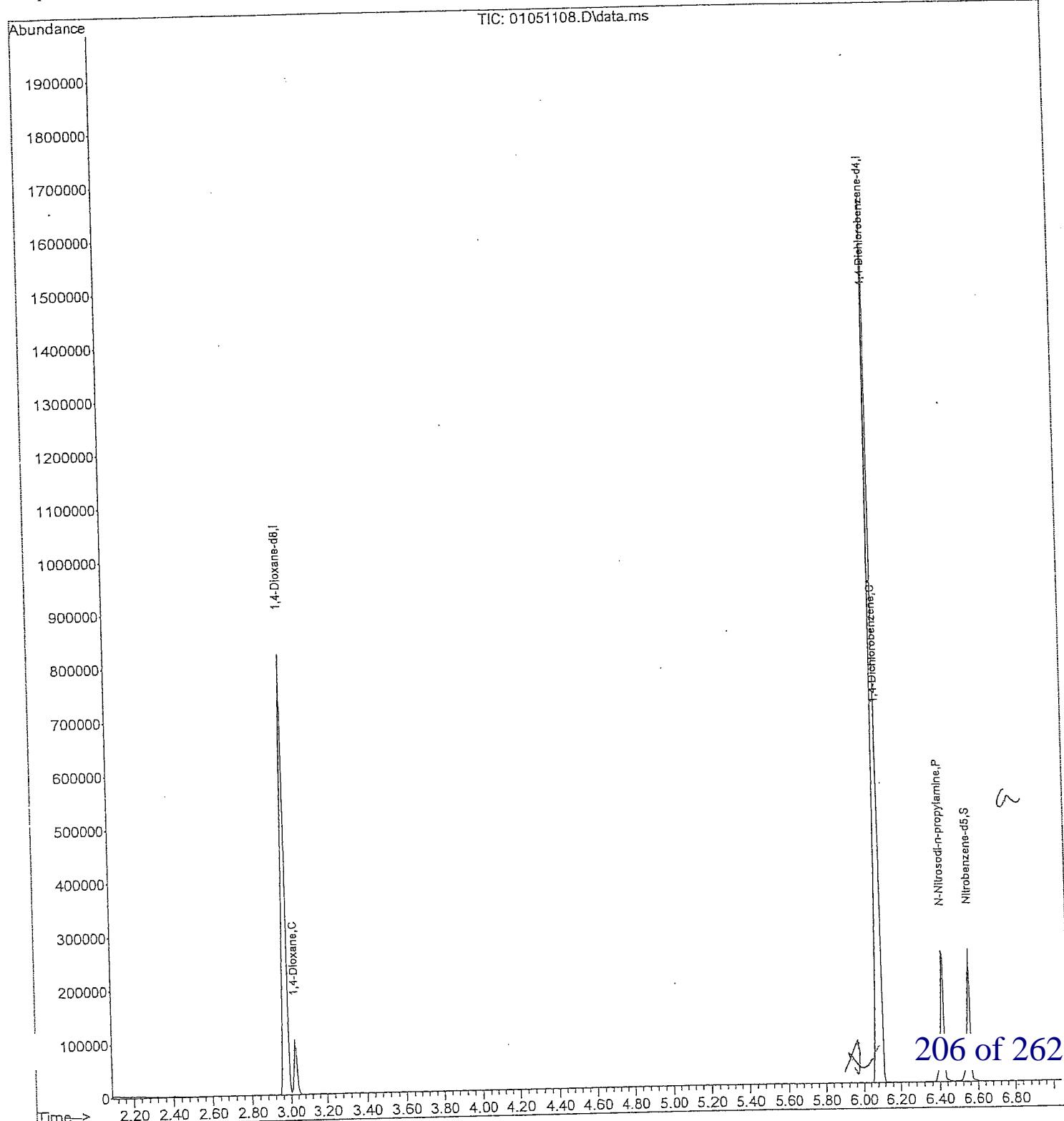
Quant Time: Jan 05 11:54:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
 Data File : 01051109.D  
 Acq On : 5 Jan 2011 11:59 am  
 Operator : CL  
 Sample : 4.0ug/mL PU00062  
 Misc : 1,4-DIOXANE  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 12:19:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.957	96	304589	20.00	ug/mL	0.01
3) 1,4-Dichlorobenzene-d4	6.092	152	229794	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	173101	5.62	ug/mL	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.004	88	65016	4.24	ug/mL	100
4) 1,4-Dichlorobenzene	6.104	146	157766	4.23	ug/mL	98
5) N-Nitrosodi-n-propylamine	6.422	70	115445	5.73	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

U1.5-11

207 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051109.D

Acq On : 5 Jan 2011 11:59 am

Operator : CL

Sample : 4.0ug/mL PU00062

Misc : 1,4-DIOXANE

ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 05 12:19:44 2011

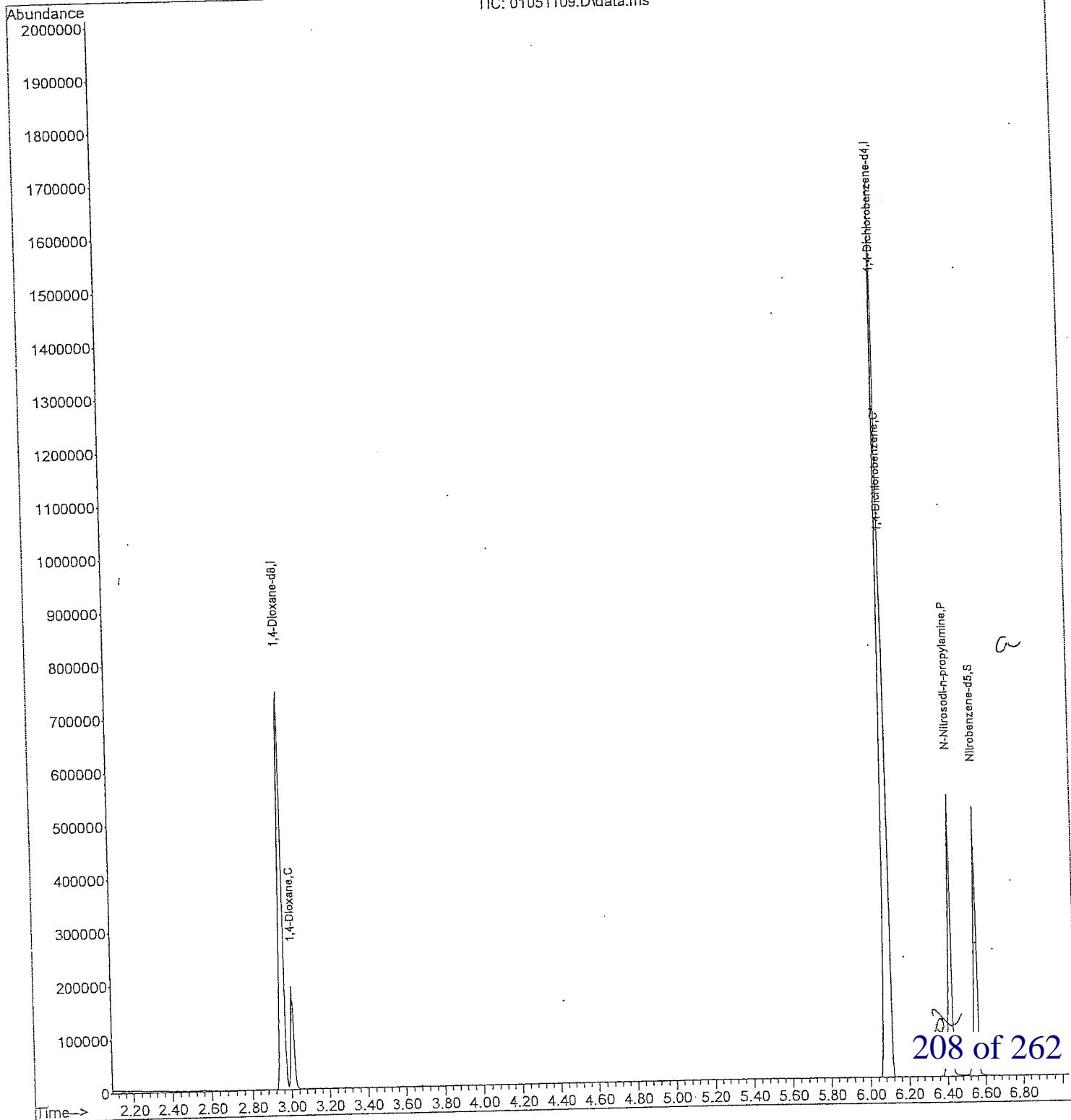
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) .CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

TIC: 01051109.D\data.ms



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 0105110.D

Acq On : 5 Jan 2011 12:12 pm

Operator : CL

Sample : 10ug/mL PU00063

Misc : 1,4-DIOXANE

ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2. 975	96	326940	20.00	ug/mL	0.03
3) 1,4-Dichlorobenzene-d4	6. 092	152	243008	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 557	82	454083	13.94	ug/mL	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3. 028	88	171569	10.42	ug/mL	99
4) 1,4-Dichlorobenzene	6. 104	146	404965	10.27	ug/mL	99
5) N-Nitrosodi-n-propylamine	6. 422	70	304989	14.31	ug/mL	100

(#= qualifier out of range (m)= manual integration (+)= signals summed

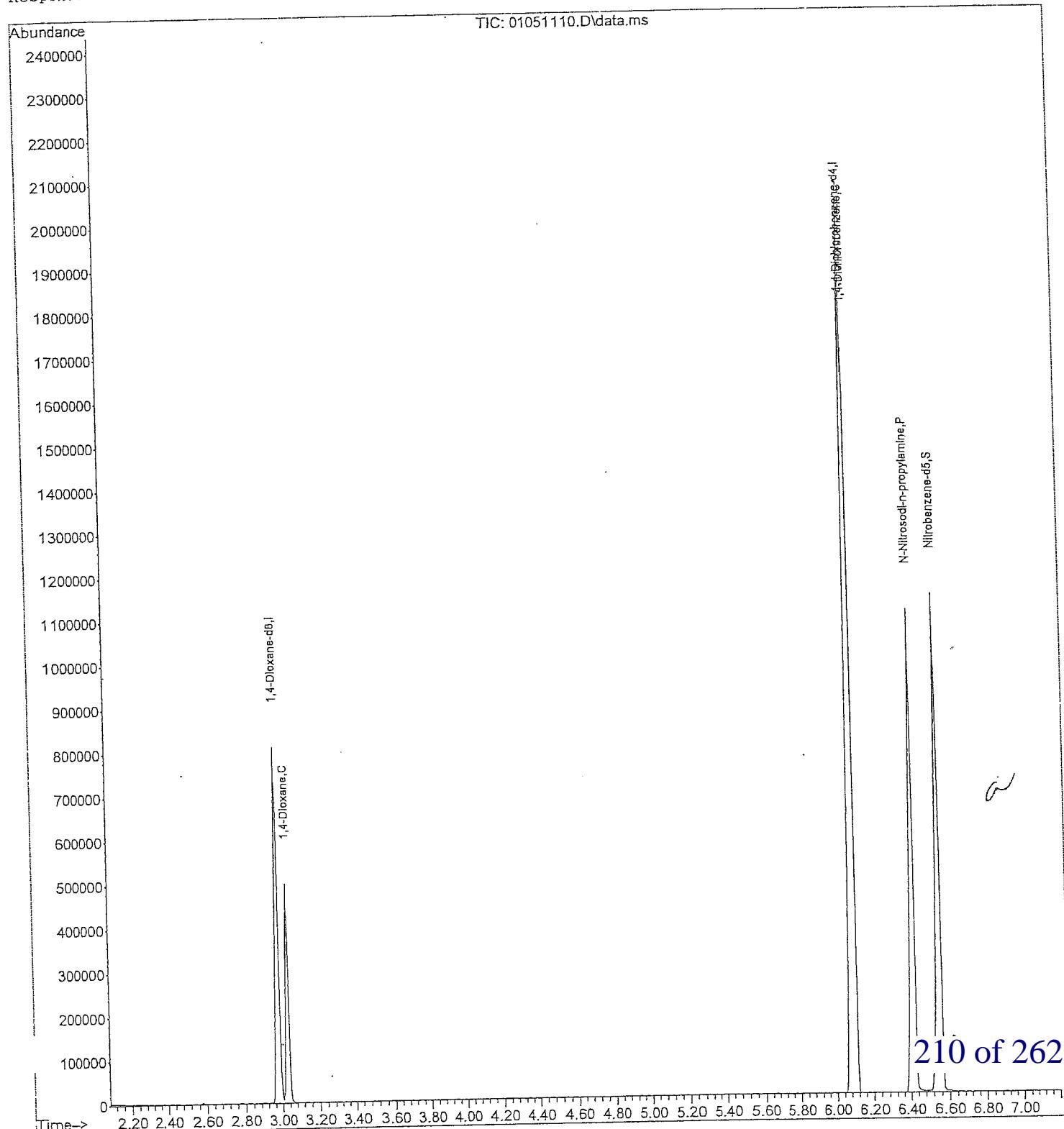
C1-S11

209 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\  
Data File : 01051110.D  
Acq On : 5 Jan 2011 12:12 pm  
Operator : CL  
Sample : 10ug/mL PU00063  
Misc : 1, 4-DIOXANE  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 05 12:20:18 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 0105111.D

Acq On : 5 Jan 2011 12:25 pm

Operator : CL

Sample : 20ug/mL PU00064

Misc : 1,4-DIOXANE

ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 05 12:43:52 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.892	96	258958	20.00	ug/mL	-0.05
3) 1,4-Dichlorobenzene-d4	6.092	152	185062	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.563	82	670408	27.02	ug/mL	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.951	88	261828	20.07	ug/mL	100
4) 1,4-Dichlorobenzene	6.104	146	613271	20.43	ug/mL	100
5) N-Nitrosodi-n-propylamine	6.428	70	453173	27.92	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

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211 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\

Data File : 01051111.D

Acq On : 5 Jan 2011 12:25 pm

Operator : CL

Sample : 20ug/mL PU00064

Misc : 1,4-DIOXANE

ALS Vial : 11 Sample Multiplier: 1

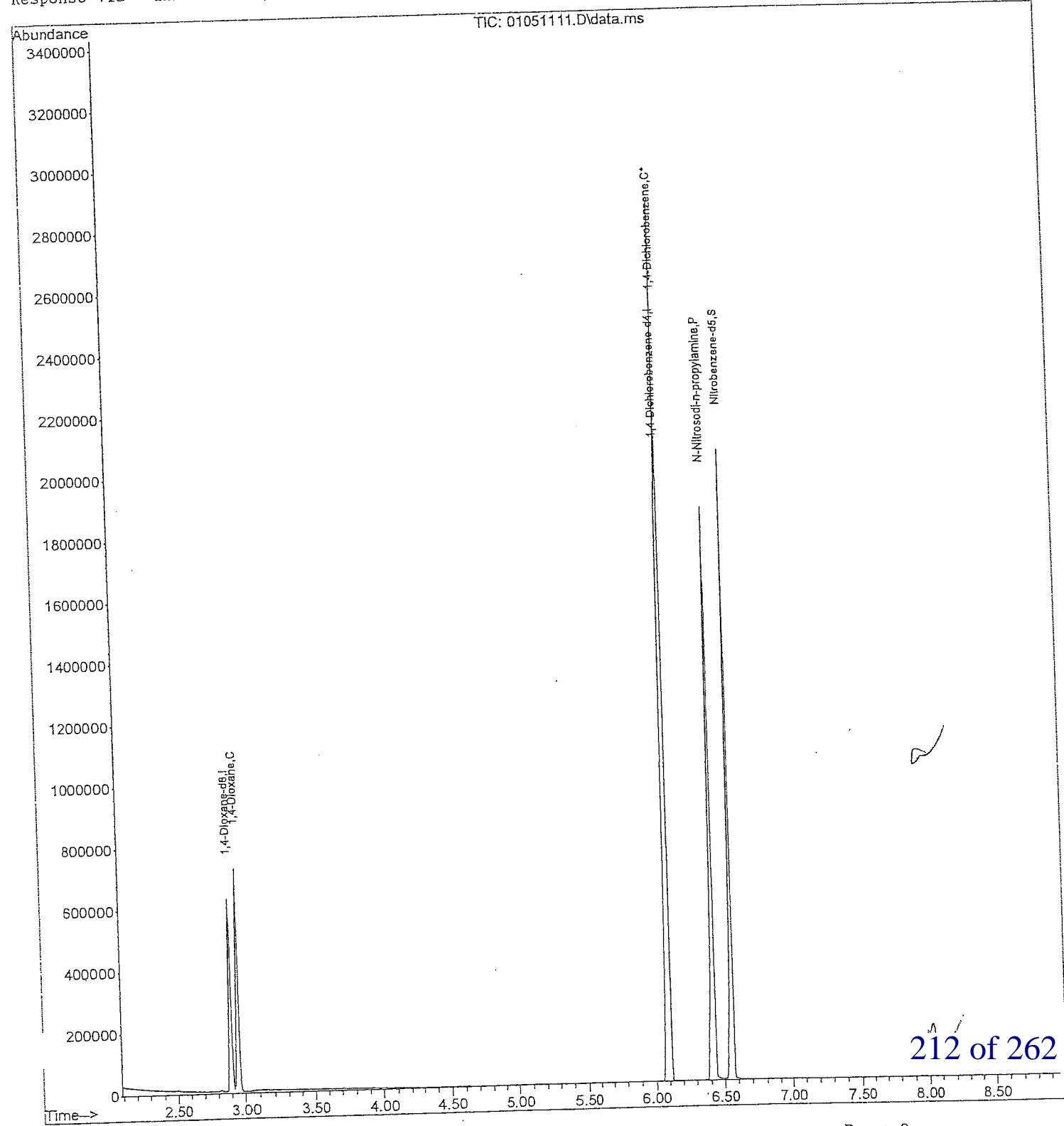
Quant Time: Jan 05 12:43:52 2011

Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051112.D

Acq On : 5 Jan 2011 12:41 pm

Operator : CL

Sample : 30ug/mL PU00065

Misc : 1, 4-DIOXANE

ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 975	96	330882	20.00	ug/mL	0.03
3) 1, 4-Dichlorobenzene-d4	6. 092	152	235894	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 563	82	1276344	40.36	ug/mL	0.00
Target Compounds						
2) 1, 4-Dioxane	3. 040	88	495415	29.72	ug/mL	98
4) 1, 4-Dichlorobenzene	6. 104	146	1137949	29.74	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 428	70	858130	41.47	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

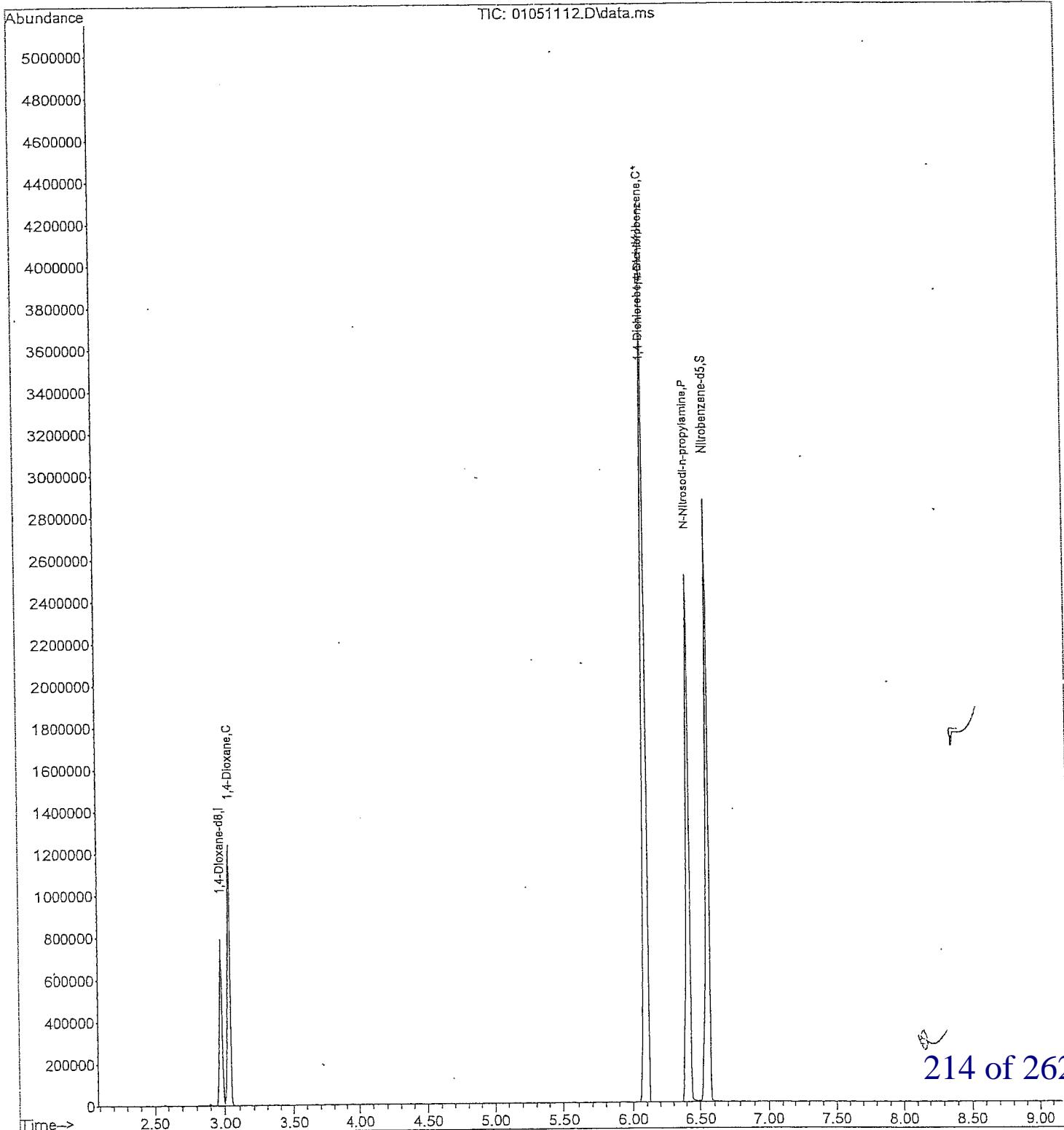
01-5-11

213 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
Data File : 01051112.D  
Acq On : 5 Jan 2011 12:41 pm  
Operator : CL  
Sample : 30ug/mL PU00065  
Misc : 1, 4-DIOXANE  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 05 12:57:20 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 11:25:11 2011  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1,4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.875	96	235570	20.00	ug/mL	-0.07
3) 1,4-Dichlorobenzene-d4	6.093	152	170137	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.569	82	1198475	52.55	ug/mL	0.01
Target Compounds					Qvalue	
2) 1,4-Dioxane	2.940	88	479723	40.42	ug/mL	99
4) 1,4-Dichlorobenzene	6.110	146	1084666	39.30	ug/mL	99
5) N-Nitrosodi-n-propylamine	6.434	70	813006	54.48	ug/mL	100

(##) = qualifier out of range (m) = manual integration (+) = signals summed

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215 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051113.D

Acq On : 5 Jan 2011 12:58 pm

Operator : CL

Sample : 40ug/mL PU00066

Misc : 1, 4-DIOXANE

ALS Vial : 13 Sample Multiplier: 1

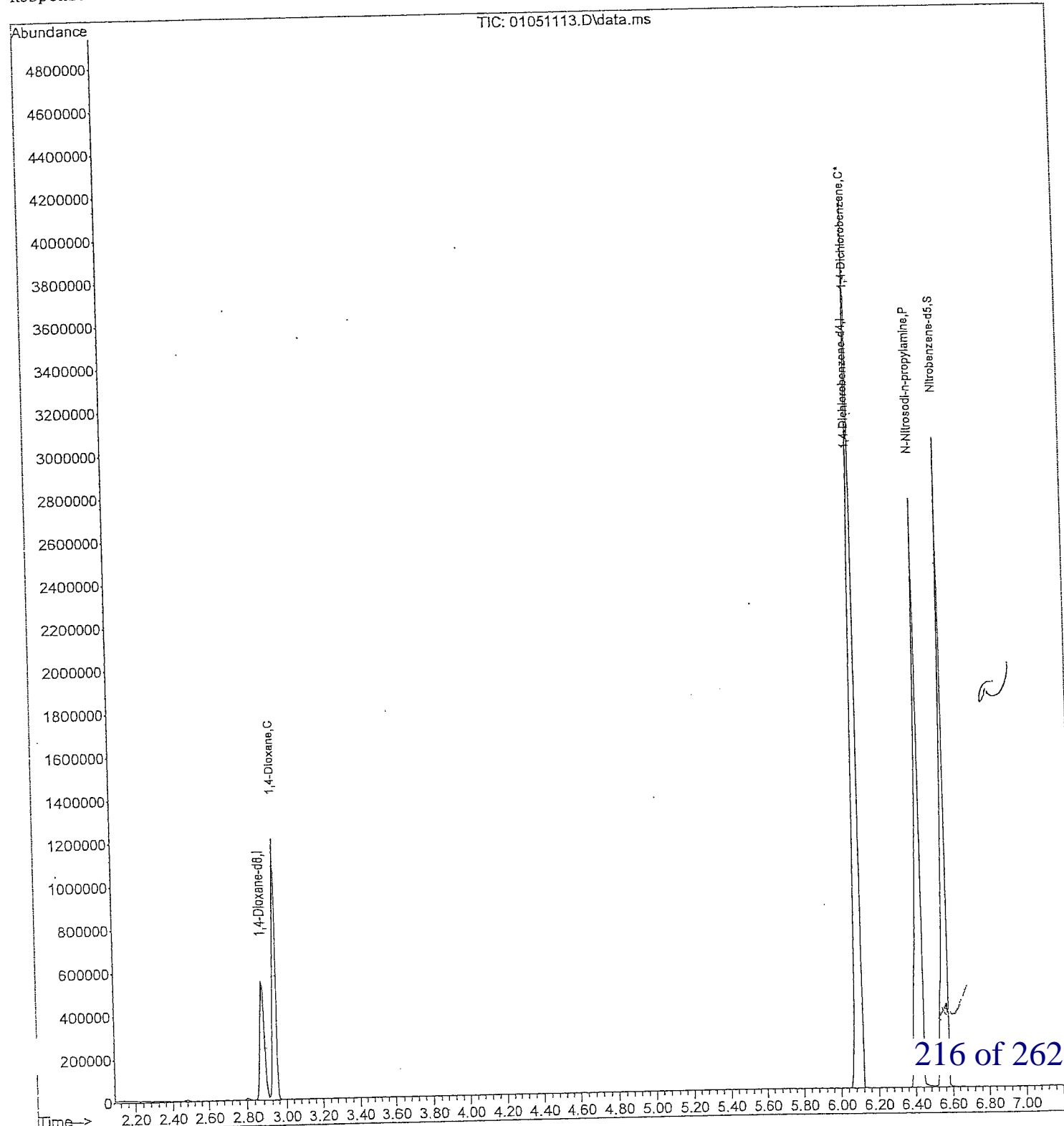
Quant Time: Jan 05 13:09:05 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm.

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 787	96	203549m	20. 00	ug/mL	-0. 16
3) 1, 4-Dichlorobenzene-d4	6. 092	152	140662	10. 00	ug/mL	0. 00
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 581	82	2386881	126. 59	ug/mL	0. 02
Target Compounds					Qvalue	
2) 1, 4-Dioxane	2. 863	88	957052m	93. 33	ug/mL	
4) 1, 4-Dichlorobenzene	6. 110	146	2103702	92. 19	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 451	70	1646696	133. 46	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

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217 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

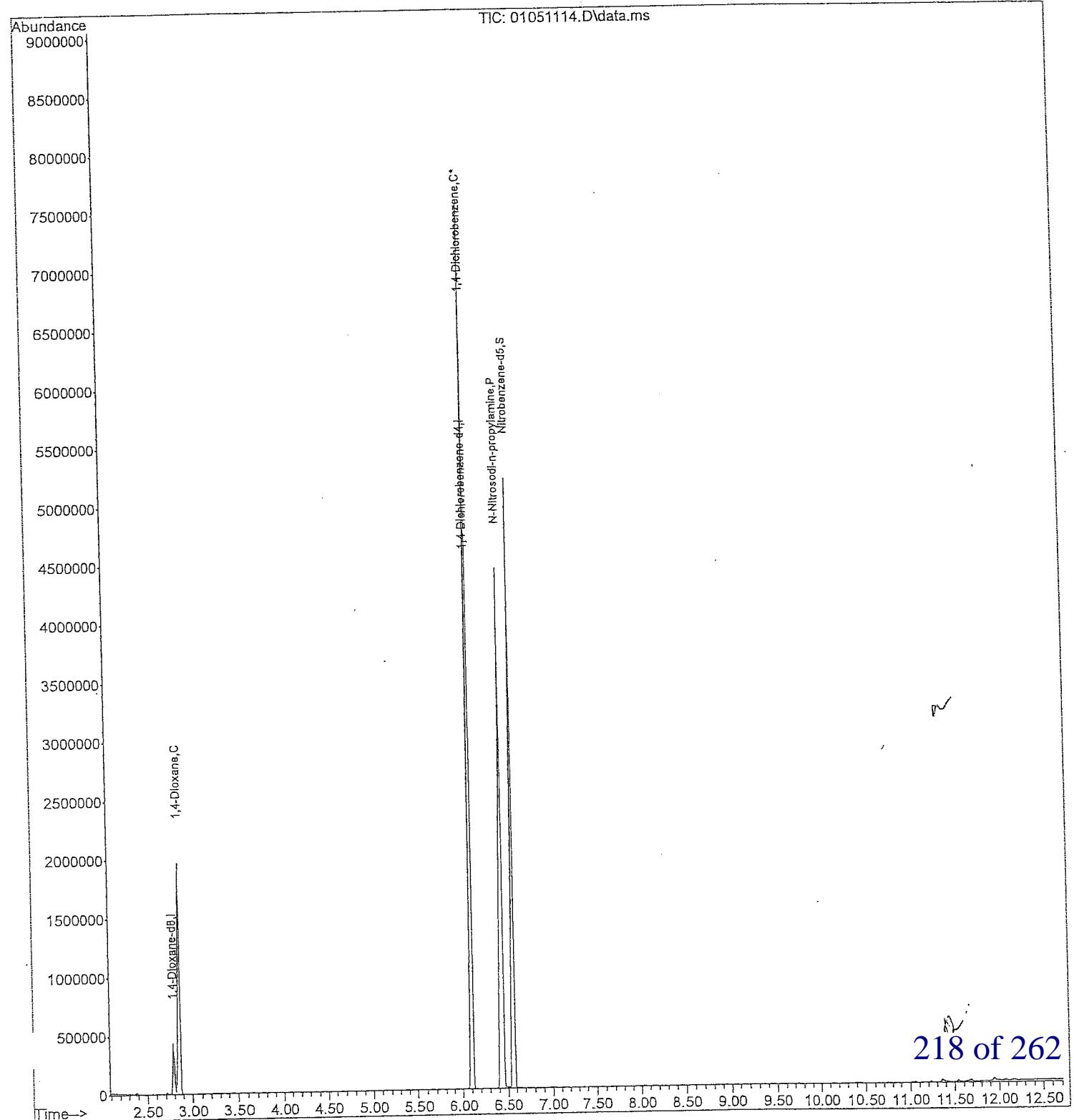
Quant Time: Jan 05 13:26:30 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

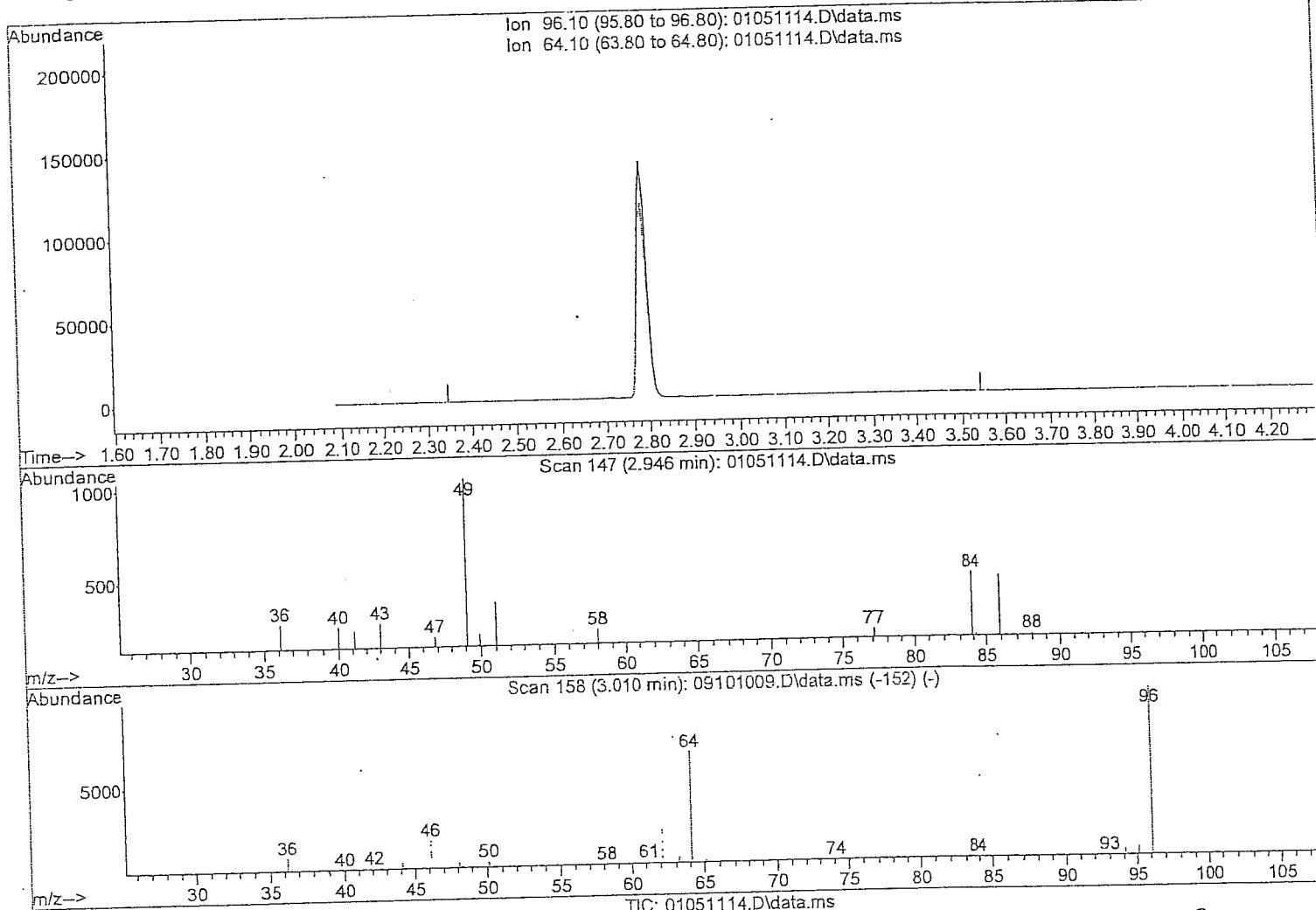
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (I)

2.946min (-2.946) 0.00ug/mL

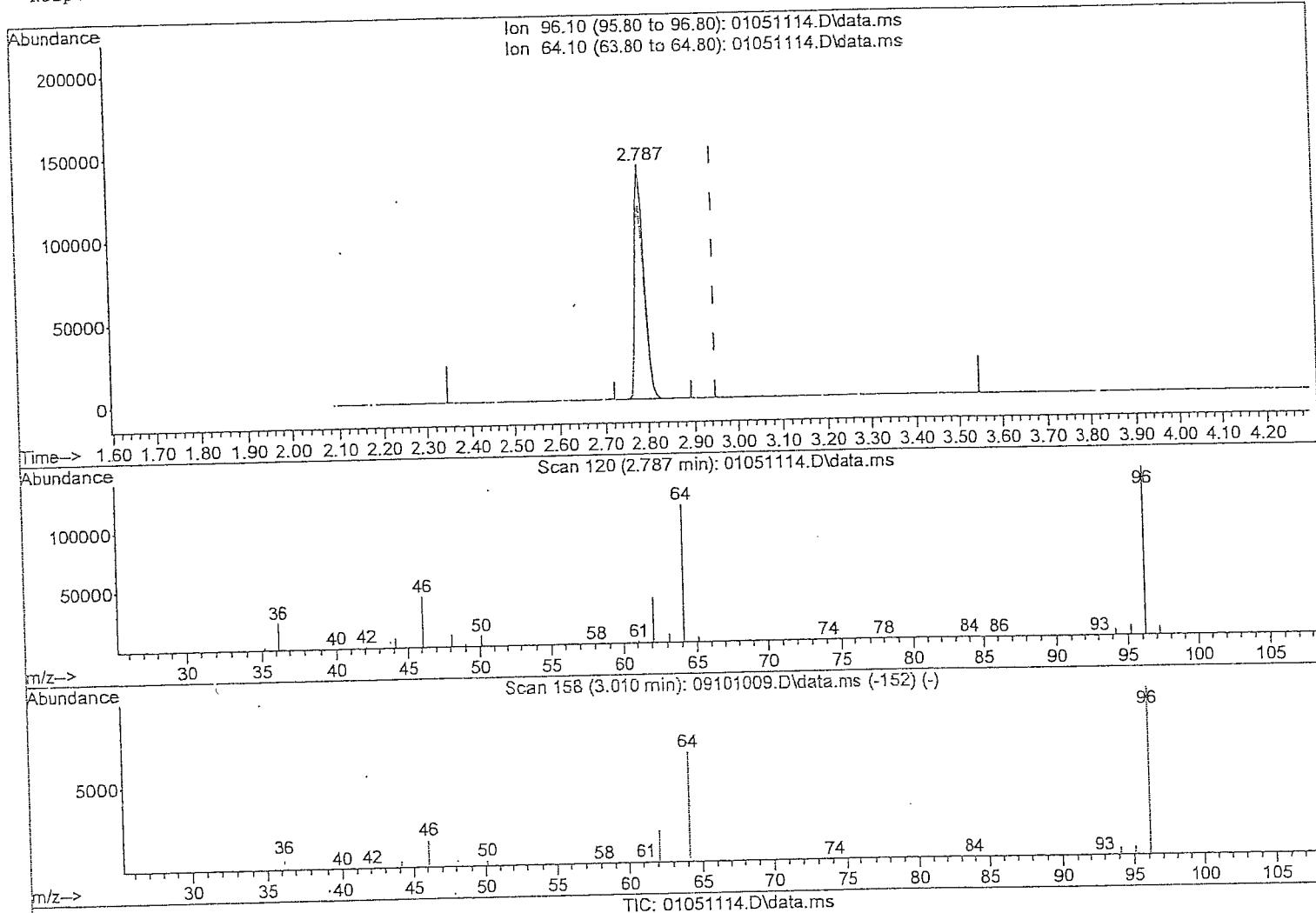
response 0

Ion	Exp%	Act%
96.10	100	0.00
64.10	83.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\Y  
 Data File : 01051114.D  
 Acq On : 5 Jan 2011 1:11 pm  
 Operator : CL  
 Sample : 100ug/mL PU0067  
 Misc : 1, 4-DIOXANE  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 05 13:24:44 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Wed Jan 05 11:25:11 2011  
 Response via : Initial Calibration



(1) 1,4-Dioxane-d8 (l)

2.787min (-0.159) 20.00ug/mL m

response 203549

Ion	Exp%	Act%
96.10	100	100
64.10	83.80	83.74
0.00	0.00	0.00
0.00	0.00	0.00

A  
B  
C  
220 of 262

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1,4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

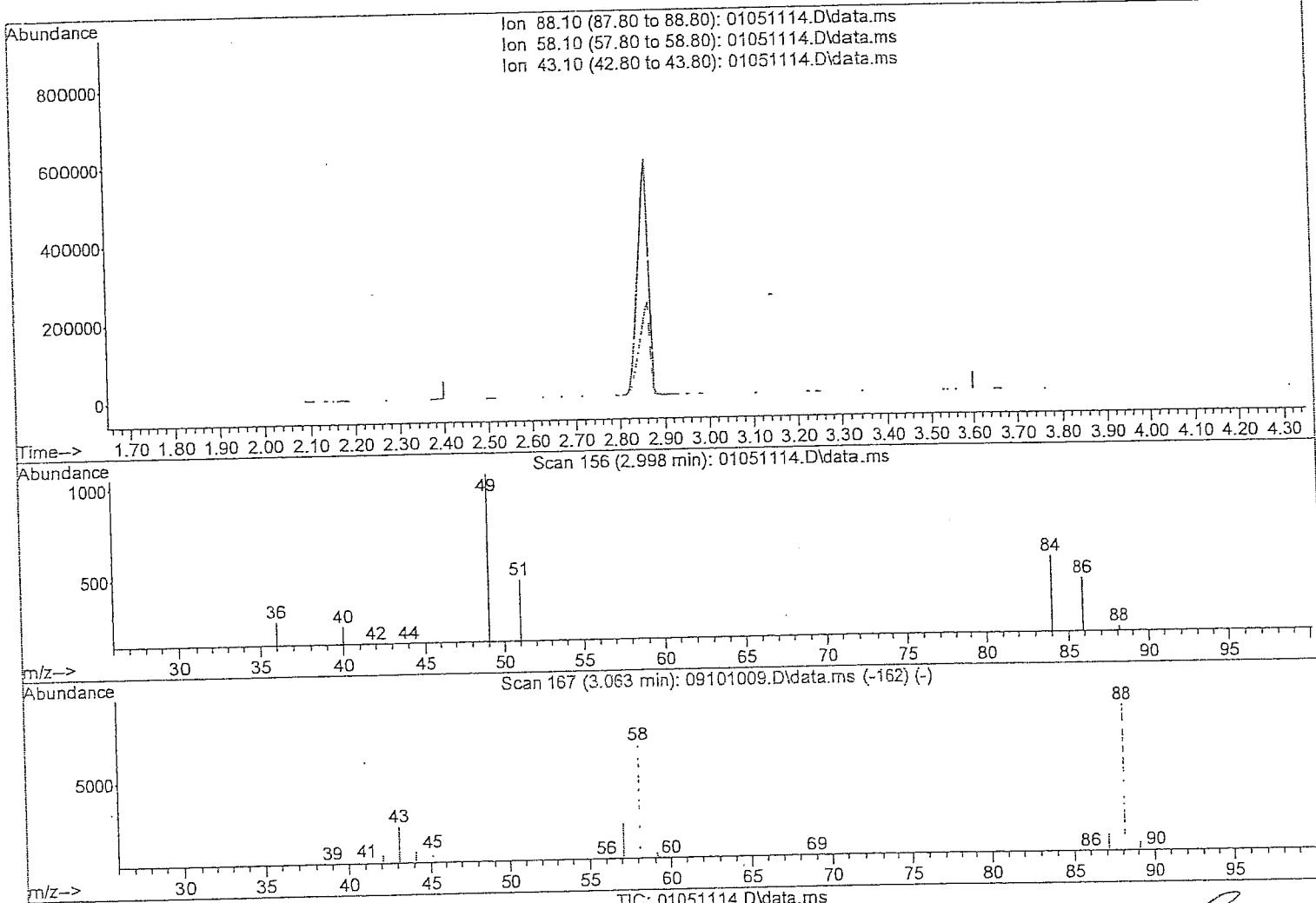
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.998min (-2.998) 0.00ug/mL

response 0

Ion	Exp%	Act%
88.10	100	0.00
58.10	97.70	0.00#
43.10	38.10	0.00#
0.00	0.00	0.00

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221 of 262

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051114.D

Acq On : 5 Jan 2011 1:11 pm

Operator : CL

Sample : 100ug/mL PU0067

Misc : 1, 4-DIOXANE

ALS Vial : 14 Sample Multiplier: 1

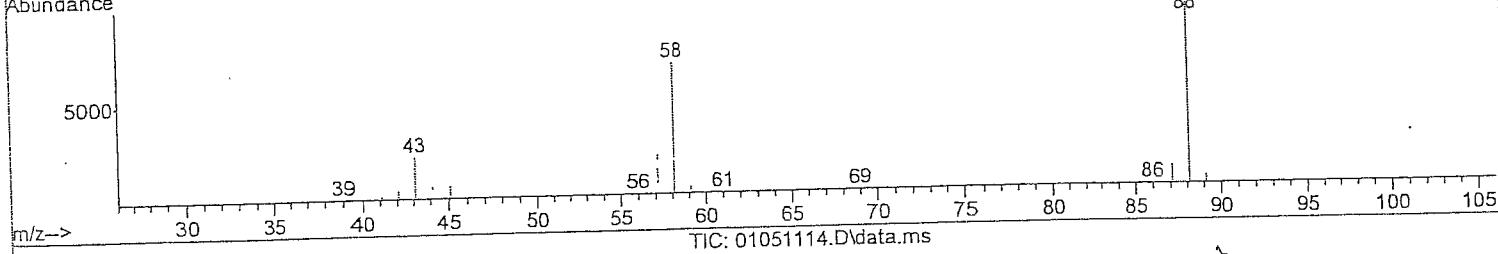
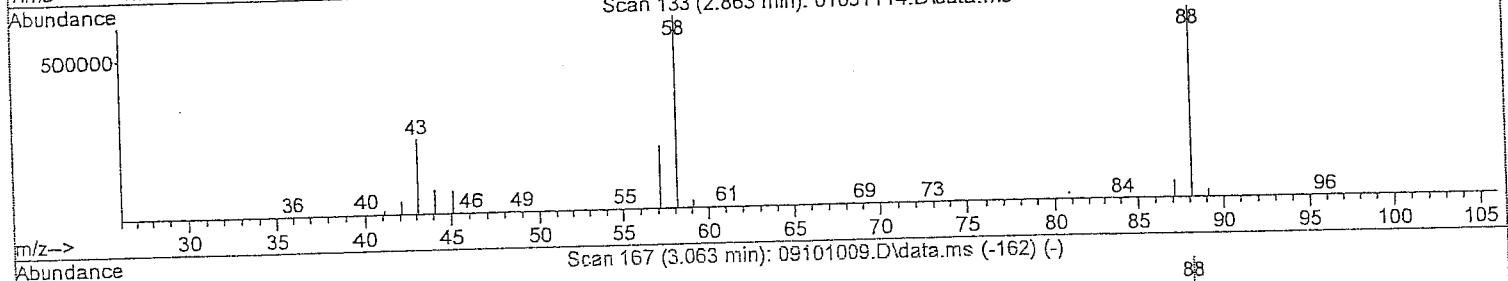
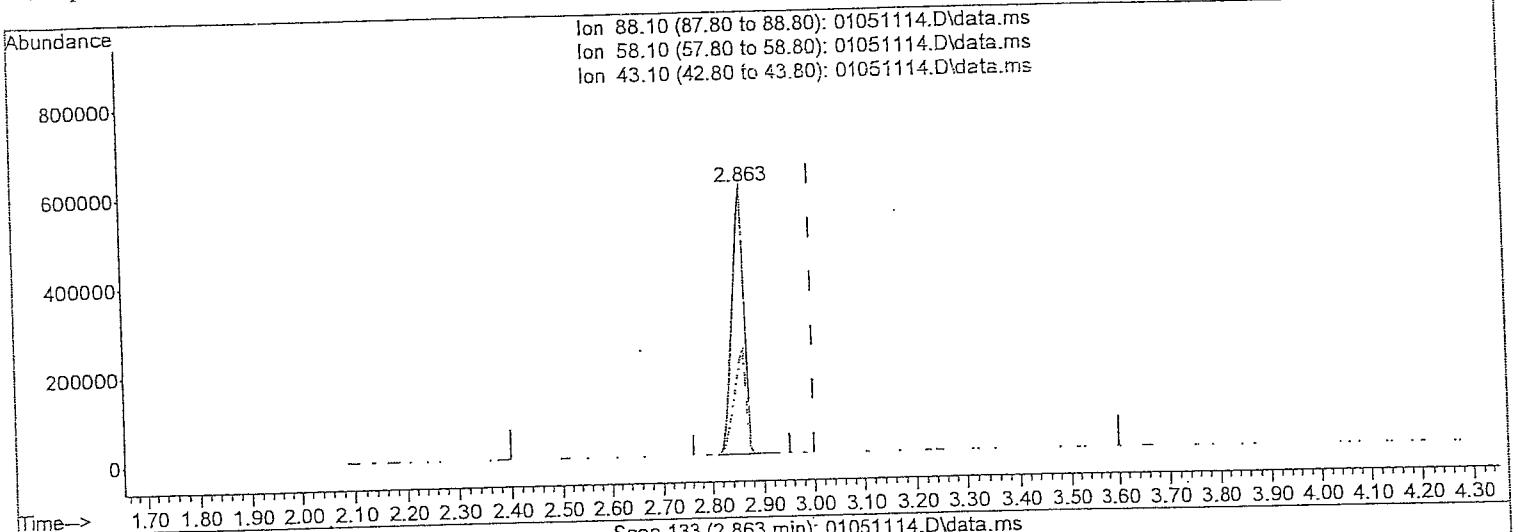
Quant Time: Jan 05 13:24:44 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 11:25:11 2011

Response via : Initial Calibration



(2) 1,4-Dioxane (C)

2.863min (-0.135) 93.33ug/mL m

response 957052

Ion	Exp%	Act%
88.10	100	100
58.10	97.70	100.08
43.10	38.10	38.93
0.00	0.00	0.00

ap. 5-11

RJCB

222 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\010511\

Data File : 01051115.D

Acq On : 5 Jan 2011 1:33 pm

Operator : CL

Sample : QCS10ug/mL PU00068

Misc : 1,4-DIOXANE

ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 05 13:43:34 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Wed Jan 05 13:29:49 2011 ✓

Response via : Initial Calibration

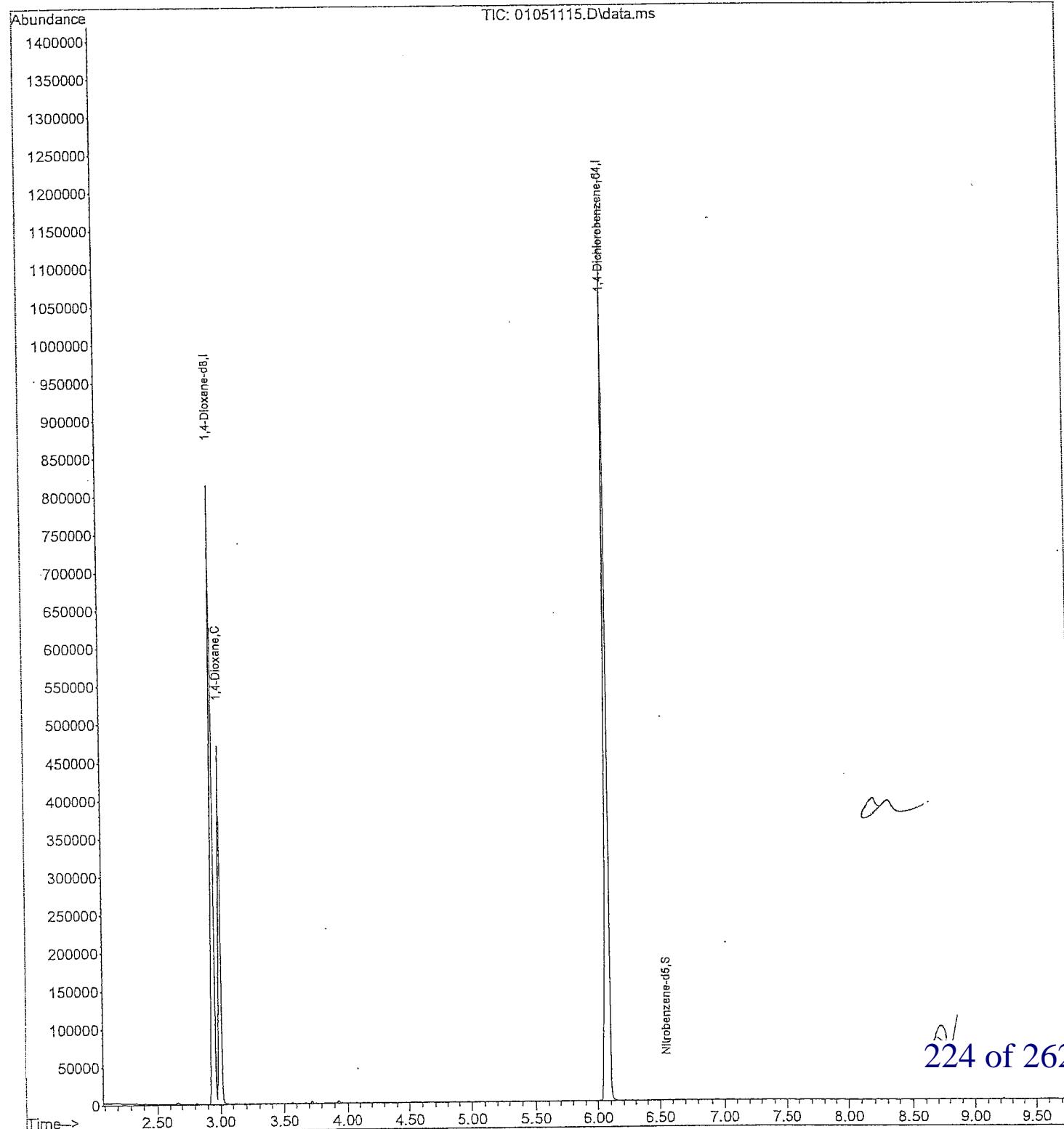
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane-d8	2.946	96	322333	20.00	ug/mL	-0.03
3) 1,4-Dichlorobenzene-d4	6.086	152	233788	10.00	ug/mL	0.00
System Monitoring Compounds						
6) Nitrobenzene-d5	6.557	82	43	0.00	ug/mL	0.00
Target Compounds						
2) 1,4-Dioxane	2.998	88	165372	10.08	ug/mL	98
4) 1,4-Dichlorobenzene	6.081	146	386	0.01	ug/mL#	1

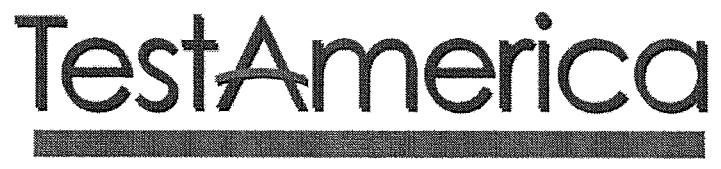
(#= qualifier out of range (m)= manual integration (+)= signals summed

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\Y1\GCMS14\DATA\010511\Y  
Data File : 01051115.D  
Acq On : 5 Jan 2011 1:33 pm  
Operator : CL  
Sample : QCS10ug/mL PU00068  
Misc : 1, 4-DIOXANE  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 05 13:43:34 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\14DIOXANE\010511.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Wed Jan 05 13:29:49 2011  
Response via : Initial Calibration





THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL DATA

METHOD: EPA 8270C

DATE: 03/18/11

WORK ORDER: PUC1113-01

**Attachment 9**  
**ANALYTICAL DATA REVIEW CHECKLIST**

SOP PE-SVD-014 R.1  
 1, 4-Dioxane by Modified EPA 8270C

Analyst: C-Laurie		Batch ID# 116075	Date Analyzed: 3-18-11		
		Description	Yes	No	NA <sup>1</sup>
1.	Tune	6:15 PM 3-18-11	/		
-	DFTPP (50 ng) meets method criteria?		/		
-	Tailing – Benzidine (Base/Neutrals) ≤ 3.0?		/		
-	All samples analyzed <12 hours from time of Tune?		/		
2.	Calibration Curve (minimum of 5 levels)		/		
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?		/		
-	CCC 1,4-Dichlorobenzene ≤30%		/		
-	All compounds RSD ≤20% or linear/quadratic $r^2 \geq 0.99$		/		
-	QCS recovered ± 30%		/		
-	Date of Initial Calibration: 01/05/11 D Instrument: C CMS14				
3.	Retention Times Updated?			/	
4.	CCVs all analytes recovered within 20% (includes CCC 1, 4-Dichlorobenzene)?		/		
-	SPCC N-Nitroso-propylamine meets min. RF 0.05?		/		
-	Internal Standard RT ± 0.5 min. from 10 ppb std. in ICAL?	✓ actual	/		
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?	✓ actual	/		
-	Analyte RRTs ± 0.06 from 50 ppb std. in ICAL?	✓ actual	/		
5.	Method Blank extracted with batch?		/		
-	All target analytes recovered <RL?		/		
6.	LCS/LCSD extracted with batch?		/		
-	Recoveries within Laboratory Limits?		/		
-	RPDs ≤ Laboratory Limits?		/		
7.	MS/MSD extracted with batch?				
-	Recoveries within Historical Limits?				
-	RPDs Laboratory Limits?				
8.	Samples extracted within 7 days from collection?		/		
-	Samples analyzed within 40 days from extraction?		/		
-	Internal Standard RT ± 0.5 min. from CCV?		/	X 3-20-11	
-	Internal Standard Areas -50% to 200% of 10 ppb std. in ICAL?	✓ actual	/	✓	
-	Maximum of 20 samples in batch?		/		I
-	Surrogate recoveries within Historical Limits?		/	✓	
Comments: IS Element ID(s): PTO 2037 (1,4-DCB-d4)					

Review Signatures:	Analyst: C-Laurie	Date: 3/21/11 ; 3/22/11
	Reviewer: Amy Plewarski	Date: 3/11/11 ; 3/22/11

1) NA: Not Applicable

## GCMS 14 - RUN LOGBOOK

Sequence Name: D:\Ymsdchem\Y1\GCMS14\sequence\031811.S

Comment:

Operator: CL/AC

Data Path: D:\MSDCHEM\Y1\GCMS14\DATA\031811.Y

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run      On A Barcode Mismatch

Full Method       Inject Anyway

Reprocessing Only       Don't Inject

Line	Sample	Sample Name/Misc Info
1)	Sample	1 03181101 DB5MS14 DCM
2)	Sample	2 03181102 DB5MS14 DCM
3)	Sample	3 03181103 DB5MS14 DCM
4)	Sample	4 03181104 DB5MS14 25ng tune std pu01447
5)	Sample	5 03181105 DIOXANE DCM
6)	Sample	6 03181106 DIOXANE 10ug/mL 14-diox-01520
7)	Sample	7 03181107 DIOXANE DCM
8)	Sample	8 03181108 DIOXANE 11C0614-BLK1
9)	Sample	9 03181109 DIOXANE 11C0614-BS1
10)	Sample	10 03181110 DIOXANE 11C0614-BSD1
11)	Sample	11 03181111 DIOXANE PUC0982-02
12)	Sample	12 03181112 DIOXANE 11C0614-MS1
13)	Sample	13 03181113 DIOXANE 11C0614-MSD1
14)	Sample	14 03181114 DIOXANE PUC0911-02
15)	Sample	15 03181115 DIOXANE 11C0614-MS2
16)	Sample	16 03181116 DIOXANE 11C0614-MSD2
17)	Sample	17 03181117 DIOXANE PUC0911-01
18)	Sample	18 03181118 DIOXANE PUC0911-03
19)	Sample	19 03181119 DIOXANE PUC0911-04
20)	Sample	20 03181120 DIOXANE PUC0911-05
21)	Sample	21 03181121 DIOXANE PUC0982-01
22)	Sample	22 03181122 DIOXANE PUC1004-01
23)	Sample	1 03181123 DB5MS14 25ng tune std pu01447
24)	Sample	2 03181124 DIOXANE DCM
25)	Sample	3 03181125 DIOXANE 10ug/mL 14-diox-01520
26)	Sample	4 03181126 DIOXANE 11C0675-BLK1
27)	Sample	5 03181127 DIOXANE 11C0675-BS1
28)	Sample	6 03181128 DIOXANE 11C0675-BSD1
29)	Sample	7 03181129 DIOXANE PUC0982-03
30)	Sample	8 03181130 DIOXANE PUC0982-04
31)	Sample	9 03181131 DIOXANE PUC1102-01-1002-01
32)	Sample	10 03181132 DIOXANE PUC0731-02RE1
33)	Sample	11 03181133 DIOXANE PUC1113-01
34)	Sample	12 03181134 DIOXANE PUC1114-01
35)	Sample	13 03181135 DIOXANE PUC1114-02
36)	Sample	14 03181136 DIOXANE PUC1114-03
37)	Sample	15 03181137 DIOXANE PUC1114-04
38)	Sample	16 03181138 DIOXANE PUC1197-01
39)	Sample	17 03181139 DIOXANE PUC1197-02
40)	Sample	18 03181140 DIOXANE PUC1197-03
41)	Sample	19 03181141 DIOXANE PUC1197-04
42)	Sample	20 03181142 DIOXANE PUC1197-05

Sequence Reviewed By: a Date: 3-20-11

227 of 262

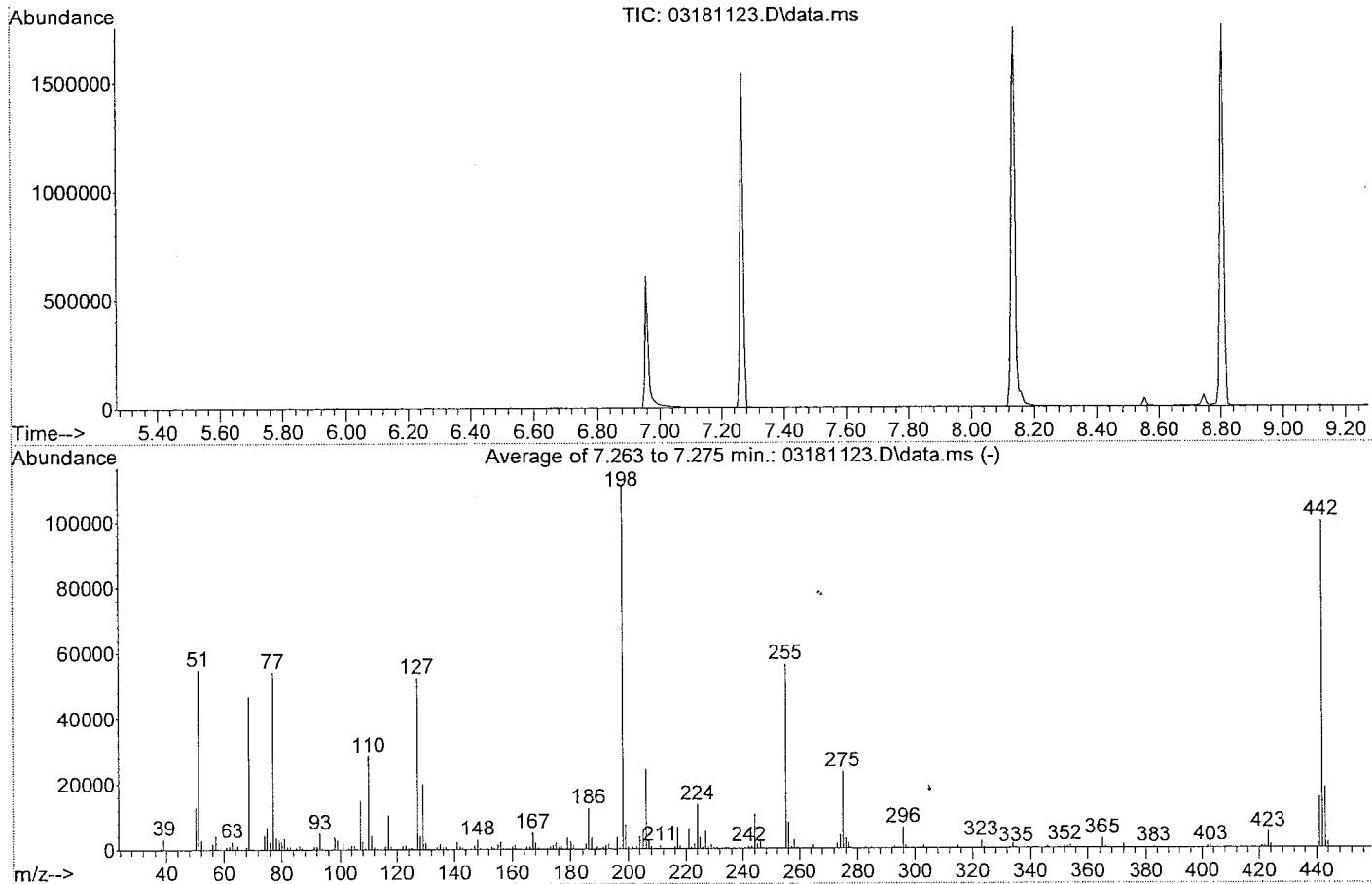
Date Analyzed: 3/20/11 Analyst: a Date Run: 3/18/11

## DFTPP

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
 Data File : 03181123.D  
 Acq On : 18 Mar 2011 6:15 pm  
 Operator : CL/AC  
 Sample : 25ng tune std pu01447  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M  
 Title : DFTPP, TAILING EVA. :ACID<5.0, BN<3.0, DEG. <=20%  
 Last Update : Thu Feb 17 11:44:41 2011



AutoFind: Scans 949, 950, 951; Background Corrected with Scan 944

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.3	54736	PASS
68	69	0.00	2	1.6	763	PASS
69	198	0.00	100	42.0	46636	PASS
70	69	0.00	2	0.4	205	PASS
127	198	40	60	47.2	52344	PASS
197	198	0.00	1	0.4	393	PASS
198	198	100	100	100.0	110938	PASS
199	198	5	9	6.6	7357	PASS
275	198	10	30	21.1	23389	PASS
365	198	1	100	2.6	2859	PASS
441	443	0.01	100	83.0	15396	PASS
442	198	40	100	89.8	99621	PASS
443	442	17	23	18.6	18549	PASS

228 of 262

Quantitation Report (Qedit)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 03181123.D

Acq On : 18 Mar 2011 6:15 pm

Operator : CL/AC

Sample : 25ng tune std pu01447

Misc :

ALS Vial : 1 Sample Multiplier: 1

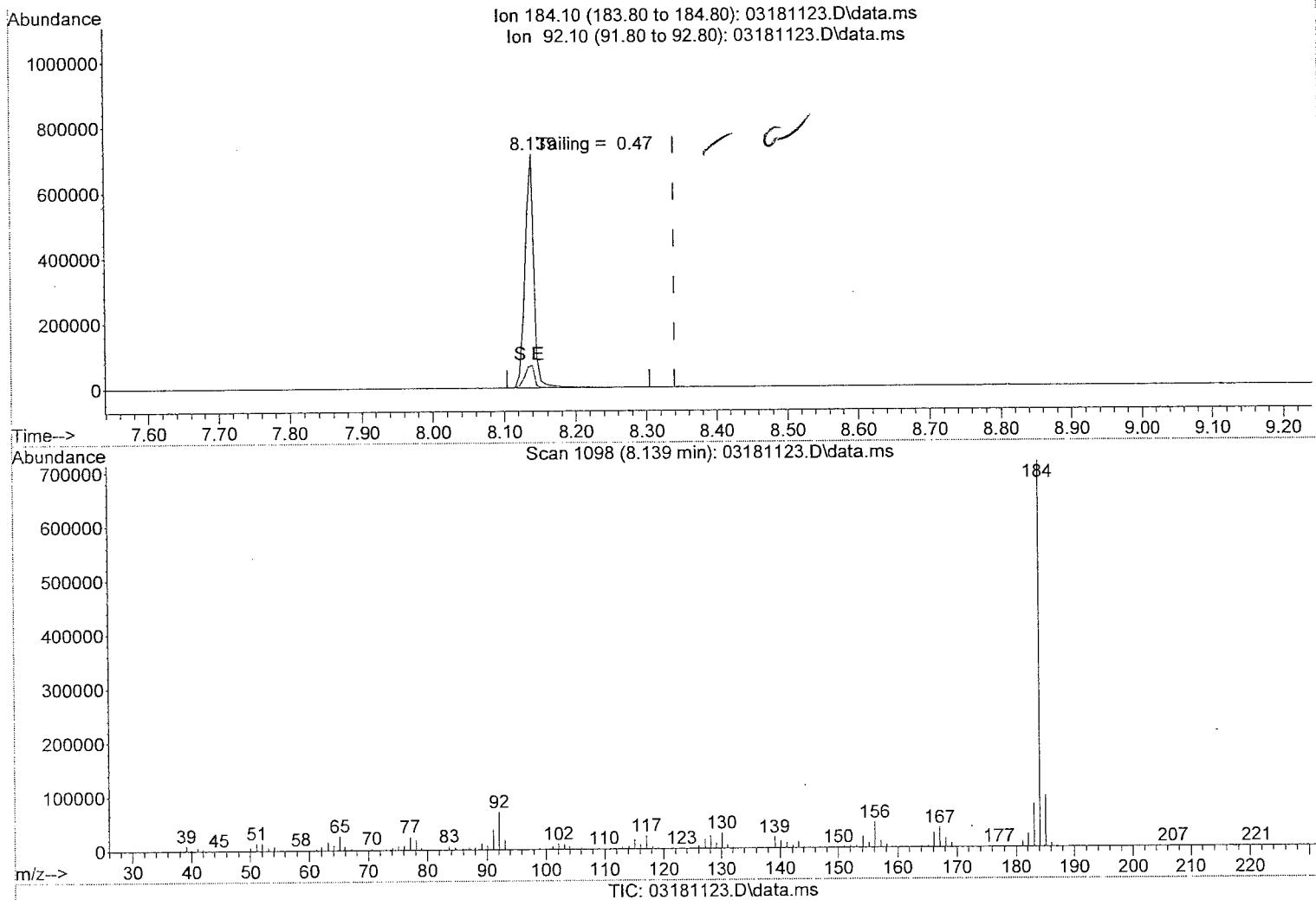
Quant Time: Mar 21 13:47:24 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\TUNE8270.M

Quant Title : DFTPP, TAILING EVA.:ACID<5.0, BN<3.0, DEG. <=20%

QLast Update : Thu Feb 17 11:44:41 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\091010A\09101002.D



(2) Benzidine

8.139min (-0.200) 7.61

response 597275

Ion	Exp%	Act%
184.10	100	100
92.10	10.20	10.79
0.00	0.00	0.00
0.00	0.00	0.00

3/21/11  
229 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\

Data File : 03181125.D

Acq On : 18 Mar 2011 7:04 pm

Operator : CL/AC

Sample : 10ug/mL 14-diox-01520

Misc : CCV

ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 20 10:32:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M

Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

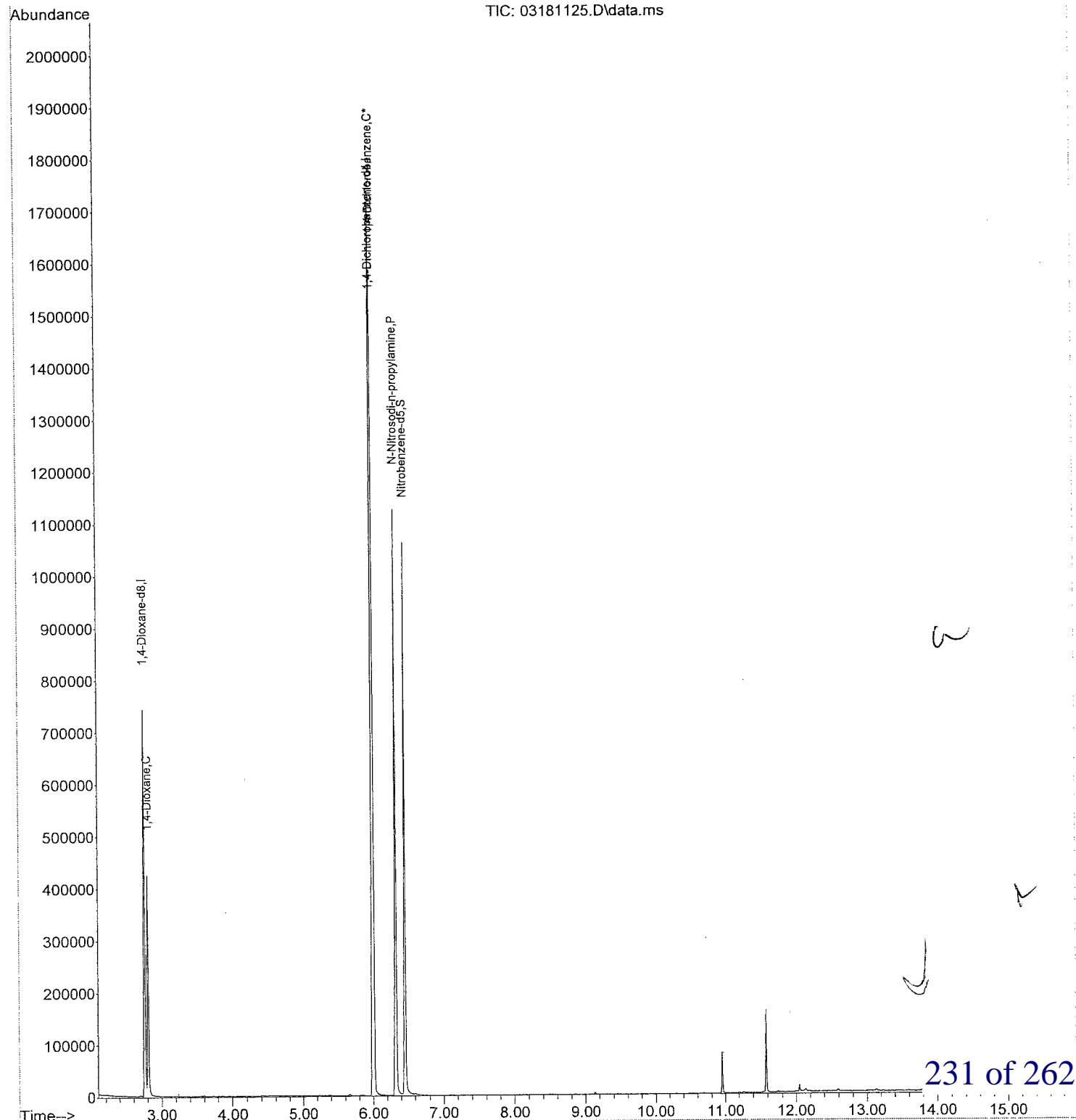
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 757	96	270295	20. 00	ug/mL	0. 01
3) 1, 4-Dichlorobenzene-d4	5. 992	152	228380	10. 00	ug/mL	-0. 02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	384960	9. 41	ug/mL	-0. 02
Target Compounds						Qvalue
2) 1, 4-Dioxane	2. 810	88	144779	10. 53	ug/mL	97
4) 1, 4-Dichlorobenzene	6. 010	146	396374	10. 56	ug/mL	100
5) N-Nitrosodi-n-propylamine	6. 328	70	266444	9. 76	ug/mL	99

(##) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : D:\YMSDCHEM\1\GCMS14\DATA\031811\Y  
Data File : 03181125.D  
Acq On : 18 Mar 2011 7:04 pm  
Operator : CL/AC  
Sample : 10ug/mL 14-diox-01520  
Misc : CCV  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 20 10:32:56 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\  
 Method File : 010511D.M  
 Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 Last Update : Mon Feb 28 10:27:25 2011  
 Response Via : Initial Calibration

Total Cpnds : 6

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dioxane-d8	96	2.746	1.000	A	1	A	B
2 C	1,4-Dioxane	88	2.793	1.017	A	2	A	B
3 I	1,4-Dichlorobenzene-d4	152	6.010	1.000	A	0	A	B
4 C*	1,4-Dichlorobenzene	146	6.028	1.003	A	1	A	B
5 P	N-Nitrosodi-n-propylamine	70	6.345	1.056	A	1	A	B
6 S	Nitrobenzene-d5	82	6.481	1.078	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

010511D.M Sun Mar 20 10:33:59 2011

2/24/11

3/21/11

## Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\

Data Path : D:\TIMECHECKER  
Data File : 03181125.D

Acq On : 18 Mar 2011 7:04 pm

Operator : CL/AC

Sample : 10 $\mu$ g/mL 14-diox-01520

Sample : 10d  
Misc : CCV

ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 20 10:32:56 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D. M

Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION

QLast Update : Mon Feb 28 10:27:25 2011

Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 40% Max. R.T. Dev 0.50min

Max. RRF Dev : 20% Max. Rel. Area : 400%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1, 4-Dioxane-d8	1. 000	1. 000	0. 0	83	0. 01
2 C	1, 4-Dioxane	1. 018	1. 071	-5. 2	84	0. 02
3 I	1, 4-Dichlorobenzene-d4	1. 000	1. 000	0. 0	94	-0. 02
4 C*	1, 4-Dichlorobenzene	1. 644	1. 736	-5. 6	98	-0. 02
5 P	N-Nitrosodi-n-propylamine	1. 195	1. 167	2. 3	87	-0. 02
6 S	Nitrobenzene-d5	1. 792	1. 686	5. 9	85	-0. 02

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Se  
B221

3/21/11

233 of 262

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181125.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 19:04  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\  
 DIOX010511.M

	CCV RESPONSE	ICAL RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	228380	243008	121504	486016	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	6.09	5.59	6.59	<-PASS

*G<sup>n-2</sup>(n-1)*  
*3/2/11*

*3/2/11*  
*3/2/11*

234 of 262

3/20/2011 10:34 AM

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181125.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 19:04  
 Misc Info CCV  
 Instrument Name GCMS14

10ug/mL PU00063  
 01051110.D  
 D:\msdchem\1\GCMS14\DATA\010511\

mid-RT

NAME	RT	CCV RRT	010511.M	AGREE	AGREE	PASS/FAIL
		Value		-0.06	0.06	
		(Target/IS)				

IS	1,4-Dioxane-d8	2.757				
	1,4-Dioxane	2.810	1.0192	1.0178	0.9578	1.0778 <-PASS
IS	1,4-Dichlorobenzene-d4	5.992				
	1,4-Dichlorobenzene	6.010	1.0029	1.0019	0.9419	1.0619 <-PASS
	N-Nitrosodi-n-propylamine	6.328	1.0560	1.0541	0.9941	1.1141 <-PASS
	Nitrobenzene-d5	6.463	1.0785	1.0763	1.0163	1.1363 <-PASS

3/24

3/24/11

Sample Name 10ug/mL 14-diox-01520  
 Data File Name 03181125.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 19:04  
 Misc Info CCV

Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03181125.D  
 D:\MSDCHEM\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	228380	228380	114190	456760	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

Daily update

03-21-11

3/21/11  
3/21/11

236 of 262

3/20/2011 10:38 AM

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 03181125.D

Acq On : 18 Mar 2011 7:04 pm

Operator : CL/AC

Sample : 10ug/mL 14-diox-01520

Misc : CCV

ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 21 14:19:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 14:18:58 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	228380	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.757	96	270337	20.00	ug/mL	100

(##) = qualifier out of range (m) = manual integration (+) = signals summed

*update**03-21-11**B22**3/21/11*

237 of 262

## Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\

Data File : 03181125.D

Acq On : 18 Mar 2011 7:04 pm

Operator : CL/AC

Sample : 10ug/mL 14-diox-01520

Misc : CCV

ALS Vial : 3 Sample Multiplier: 1

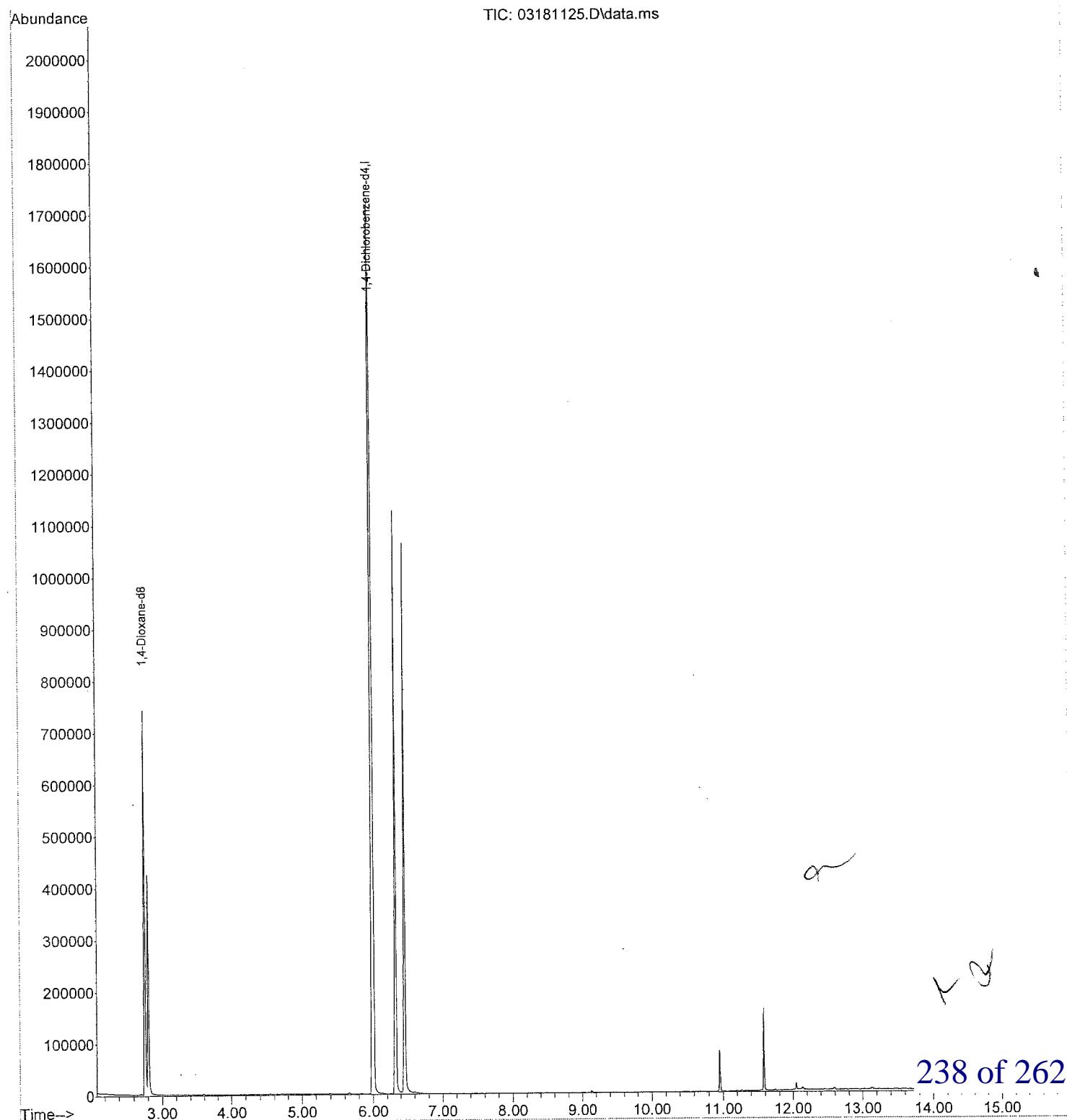
Quant Time: Mar 21 14:19:31 2011

Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 14:18:58 2011

Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D



## Calibration Status Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\  
Method File : 031811B\_D8.M  
Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
Last Updated : Mon Mar 21 14:18:58 2011  
Response Via : Continuing Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	20	10	D:\msdchem\1\GCMS14\DATA\031811\03181125.D
2	CC	20	10	D:\msdchem\1\GCMS14\DATA\031811\03181125.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Mar 21 14:18 2011	Mar 21 14:18 2011	18 Mar 2011 7:04 pm
2	CC	Mar 21 14:18 2011	Mar 21 14:18 2011	18 Mar 2011 7:04 pm

031811B\_D8.M Mon Mar 21 14:19:10 2011

✓ 3/21/11

3/21/11

3/21/11

## Compound List Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031811B\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 14:18:58 2011

Response Via : Continuing Calibration

Total Cpnds : 2

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I 1,4-Dichlorobenzene-d4	152	5.992	1.000	A	0	A	B
2	1,4-Dioxane-d8	96	2.757	0.460	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. &amp; Q Q = Qvalue L = Largest A = All

031811B\_D8.M Mon Mar 21 14:19:17 2011

*03/21/11**03/21/11**03/21/11*

## Response Factor Report GCMS14

Method Path : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\

Method File : 031811B\_D8.M

Title : GCMS14/1,4-DIOXANE-D8 SURROGATE ONLY

Last Update : Mon Mar 21 14:18:58 2011

Response Via : Continuing Calibration

Calibration Files

1 =03181125.D

	Compound	1	Avg	%RSD	
1)	I 1,4-Dichlorobenzene			ISTD	
2)	1,4-Dioxane-d8		0.592		0.592 0.00

(#= Out of Range

03/21/11

03/21/11

03/21/11

## Quantitation Report

(Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Data File : 03181126.D  
 Acq On : 18 Mar 2011 7:31 pm  
 Operator : CL/AC  
 Sample : 11C0675-BLK1  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

✓✓✓✓✓

Quant Time: Mar 20 10:35:22 2011  
 Quant Method : D:\msdcchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 745	96	186826	20.00	ug/mL	0.00
3) 1, 4-Dichlorobenzene-d4	5. 992	152	212928	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	617971	16.20	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 781	88	190	0.02	ug/mL#	5
4) 1, 4-Dichlorobenzene	5. 939	146	300	0.01	ug/mL	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

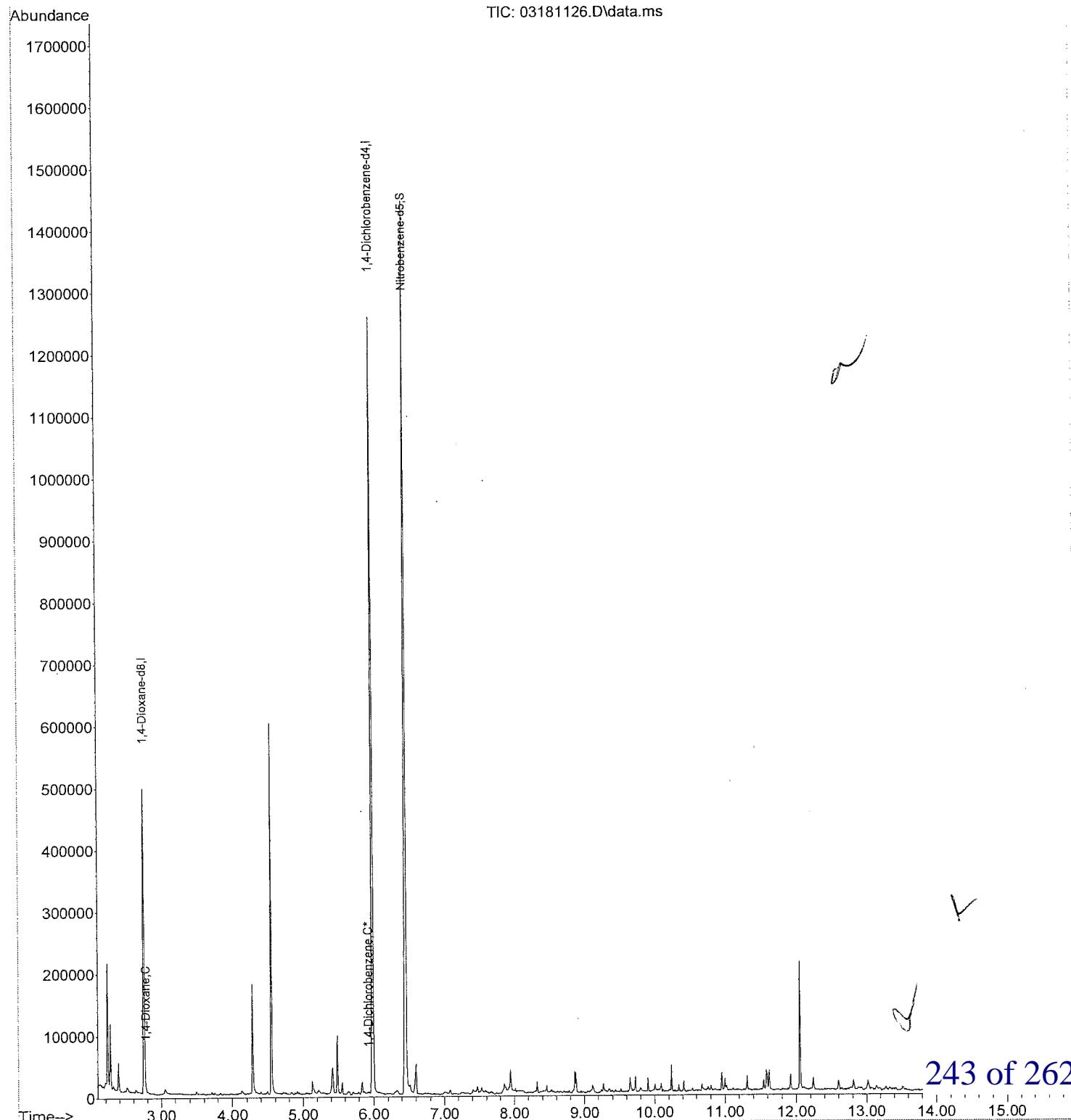
3/21/11

3/21/11

## Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\  
Data File : 03181126.D  
Acq On : 18 Mar 2011 7:31 pm  
Operator : CL/AC  
Sample : 11C0675-BLK1  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 20 10:35:22 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0675-BLK1  
 Data File Name 03181126.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 19:31  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181125.D  
 D:\MSDCHEM\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	212928 ✓	228380 ~	114190	456760	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49	<-PASS

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181126.D  
 Acq On : 18 Mar 2011 7:31 pm  
 Operator : CL/AC  
 Sample : 11C0675-BLK1  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 21 14:20:14 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 14:18:58 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 992	152	212928	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 745	96	186826	14. 82	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/24/11

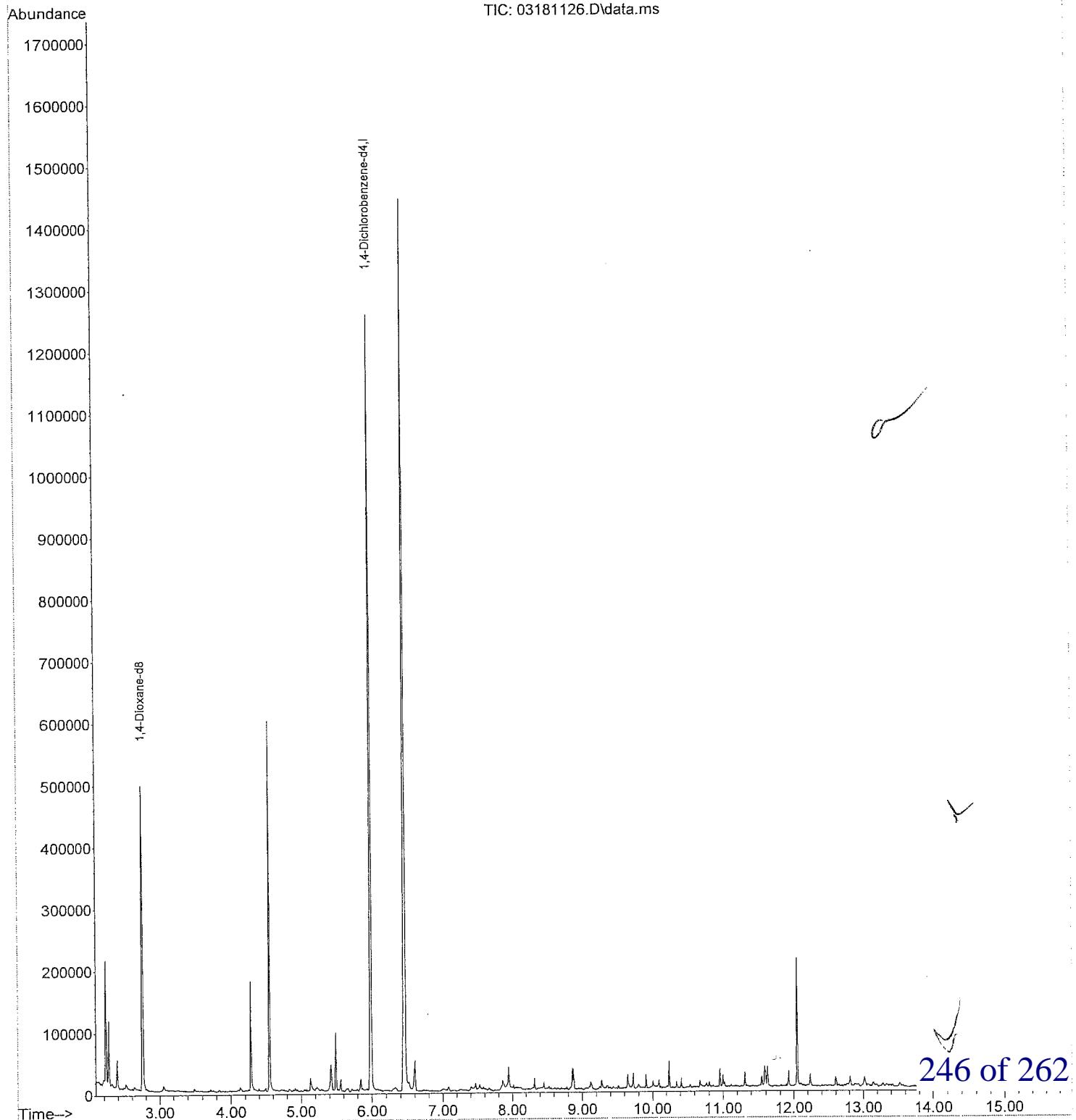
3/24/11

245 of 262

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\Y  
Data File : 03181126.D  
Acq On : 18 Mar 2011 7:31 pm  
Operator : CL/AC  
Sample : 11C0675-BLK1  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 21 14:20:14 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 14:18:58 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D



## Quantitation Report

(Not Reviewed)

Data Path : D:\YMSDCHEM\1\GCMS14\DATA\031811\  
 Data File : 03181127.D  
 Acq On : 18 Mar 2011 7:58 pm  
 Operator : CL/AC  
 Sample : 11C0675-BS1  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 10:35:27 2011  
 Quant Method : D:\Ymsdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

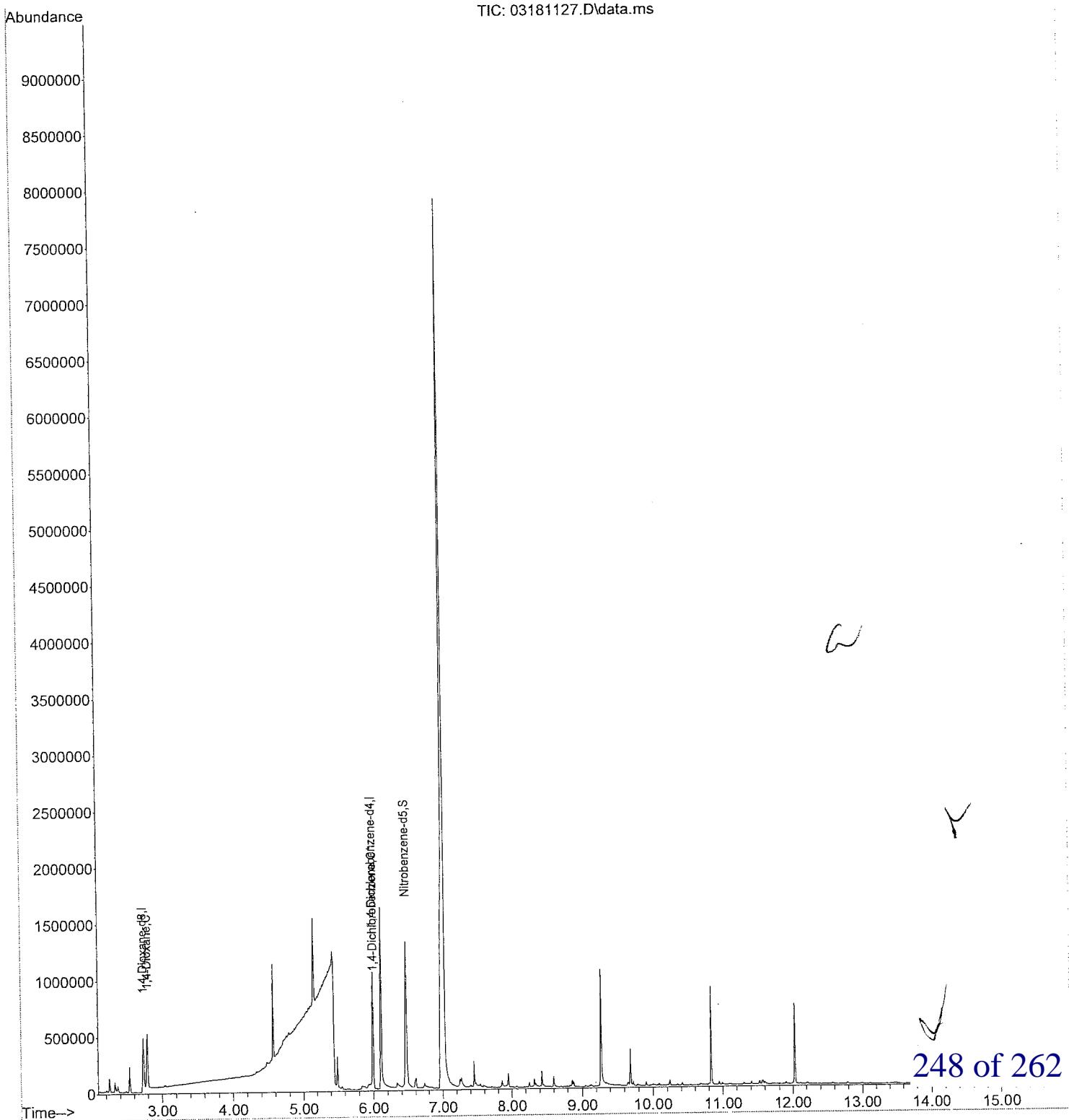
Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 734	96	178631	20.00	ug/mL	-0.01
3) 1, 4-Dichlorobenzene-d4	5. 993	152	172409	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	604317	19.56	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 793	88	187156	20.59	ug/mL	92
4) 1, 4-Dichlorobenzene	6. 004	146	302	0.01	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\  
Data File : 03181127.D  
Acq On : 18 Mar 2011 7:58 pm  
Operator : CL/AC  
Sample : 11C0675-BS1  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 20 10:35:27 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0675-BS1  
 Data File Name 03181127.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 19:58

## Misc Info

Instrument Name GCMS14

10ug/mL 14-diox-01520  
 03181125.D  
 D:\MSDCHEM\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	172409	/	228380	114190	456760 <-PASS
Internal Standard	RT	/	RT	-0.5min.	+0.5min
1,4-Dichlorobenzene-d4	5.99	/	5.99	5.49	6.49 <-PASS

249 of 262

3/20/2011 10:38 AM

## Quantitation Report

(Not Reviewed)

Data Path : D:\Ymsdchem\1\GCMS14\DATA\031811\  
Data File : 03181127.D  
Acq On : 18 Mar 2011 7:58 pm  
Operator : CL/AC  
Sample : 11C0675-BS1  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

GK 18/3/11

Quant Time: Mar 21 14:20:19 2011

Quant Method : D:\Ymsdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M

Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY

QLast Update : Mon Mar 21 14:18:58 2011

Response via : Continuing Cal File: D:\Ymsdchem\1\GCMS14\DATA\031811\03181125.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 993	152	172409	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 734	96	178631	17. 51	ug/mL	100

(#= qualifier out of range (m)= manual integration (+)= signals summed

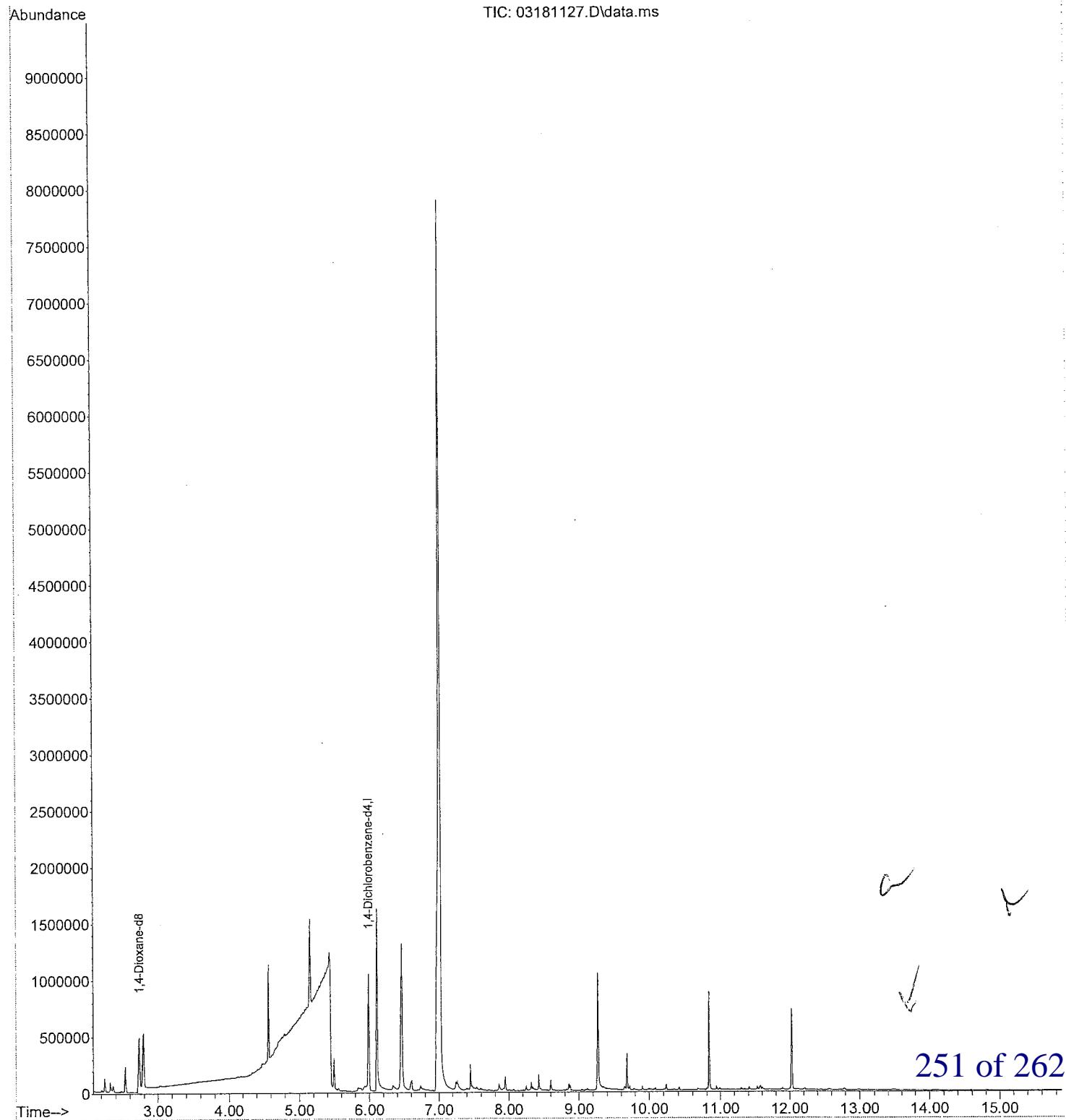
GK 18/3/11

3/24/11

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
Data File : 03181127.D  
Acq On : 18 Mar 2011 7:58 pm  
Operator : CL/AC  
Sample : 11C0675-BS1  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 14:20:19 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 14:18:58 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D



## Quantitation Report

(Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Data File : 03181128.D  
 Acq On : 18 Mar 2011 8:24 pm  
 Operator : CL/AC  
 Sample : 11C0675-BSD1  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

*F4, 21-4*

Quant Time: Mar 20 10:35:32 2011  
 Quant Method : D:\msdcchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

*initial*

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 781	96	195208	20.00	ug/mL	0.04
3) 1, 4-Dichlorobenzene-d4	5. 992	152	233794	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	708558	16.91	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 834	88	204540	20.59	ug/mL	96
4) 1, 4-Dichlorobenzene	5. 986	146	401	0.01	ug/mL#	1

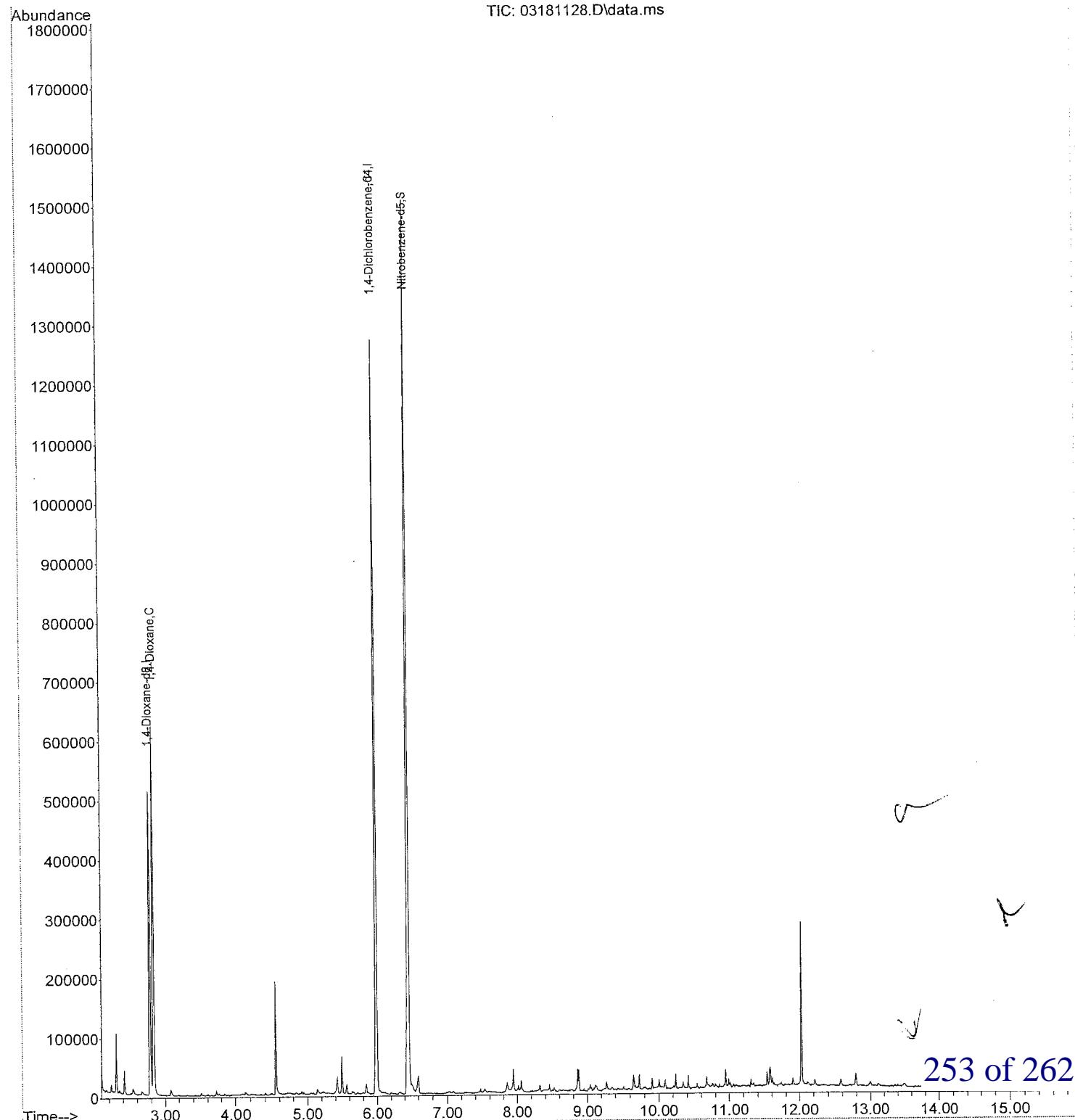
(#) = qualifier out of range (m) = manual integration (+) = signals summed

*3/21/11  
6/22/11**252 of 262*

## Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\Y  
Data File : 03181128.D  
Acq On : 18 Mar 2011 8:24 pm  
Operator : CL/AC  
Sample : 11C0675-BSD1  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 20 10:35:32 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration



Sample Name 11C0675-BSD1  
 Data File Name 03181128.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 20:24  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181125.D  
 D:\MSDCHEM\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	233794	228380	114190	456760	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99	5.99	5.49	6.49	<-PASS

*b**3/21/11**B241***254 of 262**

3/20/2011 10:38 AM

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
 Data File : 03181128.D  
 Acq On : 18 Mar 2011 8:24 pm  
 Operator : CL/AC  
 Sample : 11C0675-BSD1  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 14:20:23 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
 Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
 QLast Update : Mon Mar 21 14:18:58 2011  
 Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5. 992	152	233794	10. 00	ug/mL	0. 00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2. 781	96	195208	14. 11	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

03/21/11

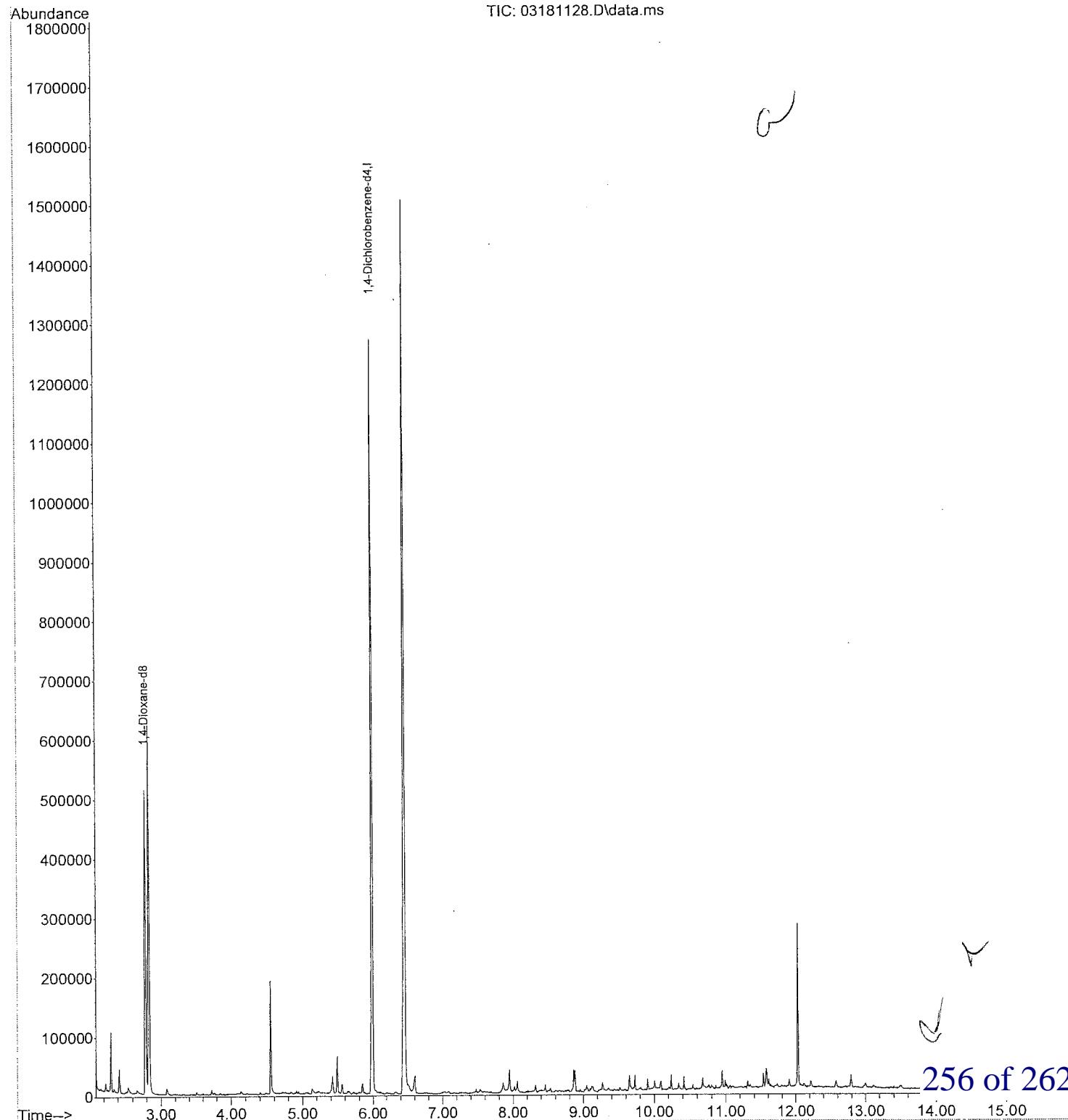
✓ 3/21/11

255 of 262

## Quantitation Report (Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
Data File : 03181128.D  
Acq On : 18 Mar 2011 8:24 pm  
Operator : CL/AC  
Sample : 11C0675-BSD1  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 21 14:20:23 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 14:18:58 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D



## Quantitation Report

(Not Reviewed)

Data Path : D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Data File : 03181133.D  
 Acq On : 18 Mar 2011 10:36 pm  
 Operator : CL/AC  
 Sample : PUC1113-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 20 10:35:57 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dioxane-d8	2. 798	96	175141	20.00	ug/mL	0.05
3) 1, 4-Dichlorobenzene-d4	5. 992	152	222205	10.00	ug/mL	-0.02
System Monitoring Compounds						
6) Nitrobenzene-d5	6. 463	82	623135	15.65	ug/mL	-0.02
Target Compounds						
2) 1, 4-Dioxane	2. 851	88	20380	2.29	ug/mL	84
4) 1, 4-Dichlorobenzene	5. 998	146	554	0.02	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/22/11

3/22/11

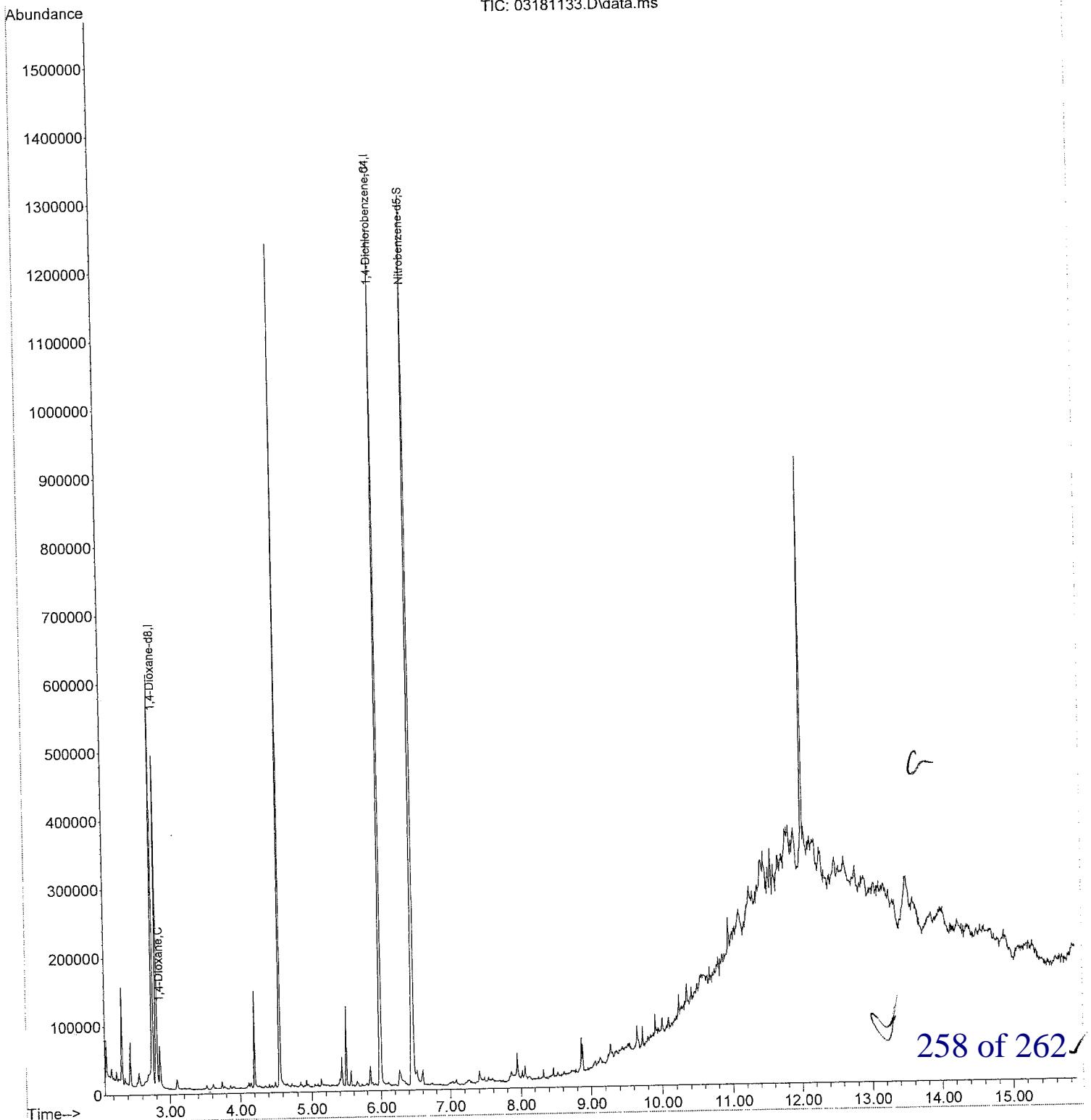
257 of 262

## Quantitation Report (Not Reviewed)

Data Path : D:\YMSDCHEM\1\GCMS14\DATA\031811\Y  
Data File : 03181133.D  
Acq On : 18 Mar 2011 10:36 pm  
Operator : CL/AC  
Sample : PUC1113-01  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 20 10:35:57 2011  
Quant Method : D:\Ymsdchem\1\GCMS14\METHODS\14DIOXANE\010511.D.M  
Quant Title : GCMS14/ MODIFIED 8270(1, 4-DIOXANE) CALIBRATION  
QLast Update : Mon Feb 28 10:27:25 2011  
Response via : Initial Calibration

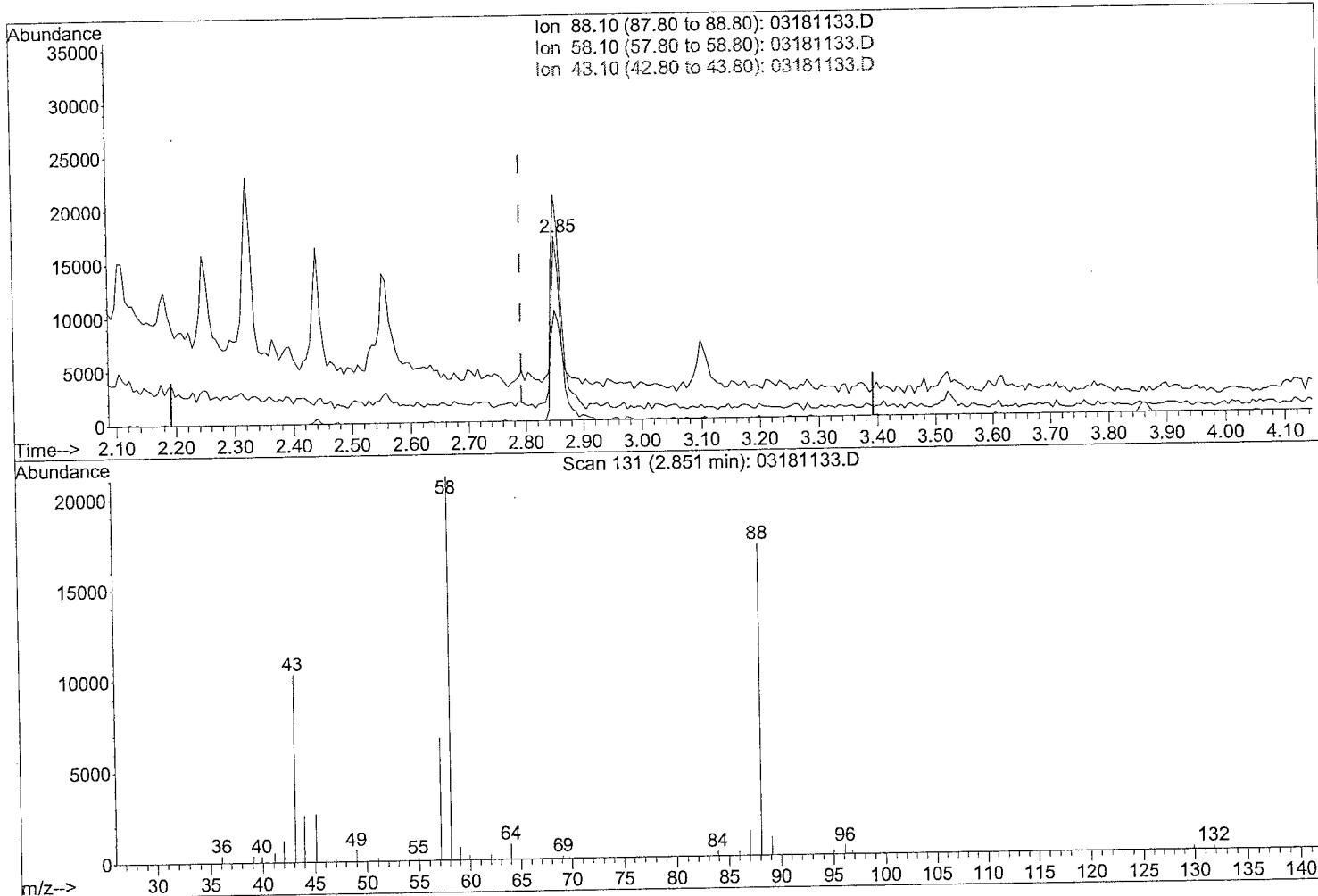
TIC: 03181133.D\data.ms



Quantitation Report (Qedit)

Data Path : N:\DATA\031811\  
 Data File : 03181133.D  
 Acq On : 18 Mar 2011 10:36 pm  
 Operator : CL/AC  
 Sample : PUC1113-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 20 10:35:57 2011  
 Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXANE\010511D.M  
 Quant Title : GCMS14/ MODIFIED 8270(1,4-DIOXANE) CALIBRATION  
 QLast Update : Mon Feb 28 10:27:25 2011  
 Response via : Initial Calibration



TIC: 03181133.D

(2) 1,4-Dioxane (C)

2.851min (+0.059) 2.29ug/mL

response 20380

Ion	Exp%	Act%
88.10	100	100
58.10	112.80	127.62
43.10	35.80	49.07
0.00	0.00	0.00

2/22/11  
2/22/11

259 of 262

Sample Name PUC1113-01  
 Data File Name 03181133.D  
 Data File Path D:\MSDCHEM\1\GCMS14\DATA\031811\  
 Operator CL/AC  
 Date Acquired 3/18/2011 22:36  
 Misc Info  
 Instrument Name GCMS14  
 10ug/mL 14-diox-01520  
 03181125.D  
 D:\MSDCHEM\1\GCMS14\DATA\031811\

	SAMPLE RESPONSE	CCV RESPONSE	0.5X	2X	PASS/FAIL
Internal Standard					
1,4-Dichlorobenzene-d4	222205 ✓	228380	114190	456760	<-PASS
Internal Standard	RT	RT	-0.5min.	+0.5min	
1,4-Dichlorobenzene-d4	5.99 ✓	5.99	5.49	6.49	<-PASS

5/22/11

G

260 of 262

3/20/2011 10:39 AM

## Quantitation Report

(Not Reviewed)

Data Path : D:\msdchem\1\GCMS14\DATA\031811\  
Data File : 03181133.D  
Acq On : 18 Mar 2011 10:36 pm  
Operator : CL/AC  
Sample : PUC1113-01  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 14:20:44 2011  
Quant Method : D:\msdchem\1\GCMS14\METHODS\14DIOXD8\031811B\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 14:18:58 2011  
Response via : Continuing Cal File: D:\msdchem\1\GCMS14\DATA\031811\03181125.D

Internal Standards	R. T.	QIon	Response	Conc	Units	Dev (Min)
1) 1, 4-Dichlorobenzene-d4	5.992	152	222205	10.00	ug/mL	0.00
Target Compounds					Qvalue	
2) 1, 4-Dioxane-d8	2.798	96	175444	13.34	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/22/11  
B221  
A  
261 of 262

Data Path : D:\msdchem\Y1\GCMS14\DATA\031811\Y  
Data File : 03181133.D  
Acq On : 18 Mar 2011 10:36 pm  
Operator : CL/AC  
Sample : PUC1113-01  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 21 14:20:44 2011  
Quant Method : D:\msdchem\Y1\GCMS14\METHODS\Y14DIOXD8\031811B\_D8.M  
Quant Title : GCMS14/1, 4-DIOXANE-D8 SURROGATE ONLY  
QLast Update : Mon Mar 21 14:18:58 2011  
Response via : Continuing Cal File: D:\msdchem\Y1\GCMS14\DATA\031811\Y03181125.D

